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Supreme Court, U.S.
FILED

No. 07-

07-715 NOV 26 2007

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IN THE

Supreme Court of the United States

JOHN WITTEN TUNNELL,

Petitioner,

v.

FORD MOTOR COMPANY,

Respondent.

ON PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE FOURTH CIRCUIT

PETITION FOR A WRIT OF CERTIORARI

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QUESTIONS PRESENTED

In this product liability diversity of citizenship action alleging that Ford's 1999 Mustang was unreasonably dangerous, Virginia law controls: absent an industry or government standard, what design is safe for intended use or foreseeable misuse of a motor vehicle is a matter for trained experts based upon, *inter alia*, published information from government and industry sources, examination of the components at issue, experiments and construction of mock-ups. Petitioner's design expert gave an exposition from published government and industry information of the thirty year history of the post-collision fire hazard in motor vehicles and the tested safety devices available to eliminate the hazard, including a device known as a battery disconnect switch. The expert designed, tested, and equipped a 1999 Mustang with a prototype switch. The expert opined that the 1999 Mustang was unreasonably dangerous without the battery disconnect switch. The district court struck all of the expert's trial testimony and granted the Respondent judgment as a matter of law. The Fourth Circuit Court of Appeals affirmed. The questions presented are:

1. Whether weighing the expert's expository trial testimony and then striking it under Federal Rule of Evidence 702 as irrelevant, because of perceived inconsistency and having no tendency under the substantive law of Kentucky to show reasonable consumer expectations, was an abuse of the trial court's gatekeeping discretion and a deprivation of Petitioner's Seventh Amendment Right to a jury trial.

2. Whether weighing the expert's expository trial testimony and then striking it under Federal Rule 702 as unreliable, because of a failure to meet a judge mandated test and *Daubert* criteria applied to hypothetical issues raised on cross examination, without consideration of other criteria pertinent to reliability or the fit of *Daubert* criteria to the issues raised, was an abuse of the trial court's gatekeeping discretion and a deprivation of Petitioner's Seventh Amendment right to a jury trial.

3. Whether granting Respondent judgment as a matter of law under Federal Rule of Civil Procedure 50(a)(1), based upon Kentucky law as controlling, violated the Rules of Decision Act, 28 U.S.C. § 1652, the *Erie* doctrine, and deprived Petitioner of his Seventh Amendment right to a jury trial.

TABLE OF CONTENTS

	Page
QUESTIONS PRESENTED	i
TABLE OF CONTENTS	iii
TABLE OF APPENDICES	vi
TABLE OF CITED AUTHORITIES	viii
OPINIONS BELOW	1
STATEMENT OF JURISDICTION	1
STATUTORY PROVISIONS INVOLVED	2
STATEMENT OF THE CASE	2
REASONS FOR GRANTING THE PETITION	17
I. The Decision Below Decided An Important Question Of Federal Law – The Scope of A Trial Court's Gatekeeping Discretion Under Federal Rule of Evidence 702 – That Has Not, But Should Be, Settled By This Court.	18
A. Certiorari Is Warranted Because The Decision Below Decided That The Relevancy Inquiry Mandated by *Daubert* Permits Exclusion of Expert Testimony At Trial Based Upon Perceived Inconsistencies And This	

Contents

Page

Court Has Not Decided The Boundary Between The Gatekeeper's Role In Weighing Inconsistent Testimony And The Traditional Role Of The Jury. 20

B. Certiorari Is Warranted Because The Decision Below Decided That Kentucky Law Was Appropriate For Determining The Relevancy Of Expert Testimony Instead Of Virginia Law And This Court Has Not Decided The Role State Substantive Law Plays In The Gatekeeper's Determination of Relevancy And Reliability Mandated by *Daubert*. . . 21

C. Certiorari Is Warranted Because the Decision Below Decided That Consideration of Pertinent Criteria By The Gatekeeper Other Than The *Daubert* Criteria Was Not Necessary To Determine Reliability, That A Judge Mandated Scientific Test Is Appropriate To Determine Reliability, And This Court Has Not Decided Whether Failure To Consider Other Pertinent Criteria And Determining Reliability Based Upon A Judge Mandated Test Constitute Abuses Of Gatekeeping Discretion. . 23

Contents

Page

II. The Decision Below Violates The Rules Of Decision Act And So Far Departs From The Accepted And Usual Course Of Judicial Proceedings, And Sanctions Such A Departure By A Lower Court, To Call For An Exercise Of This Court's Supervisory Power. 27

CONCLUSION 30

TABLE OF APPENDICES

Page

Appendix A — Opinion Of The United States Court Of Appeals For The Fourth Circuit Decided August 1, 2007 ..... 1a

Appendix B — Memorandum Opinion Of The United States District Court For The Western District Of Virginia, Danville Division Filed September 2, 2005 ..... 12a

Appendix C — Memorandum Opinion Of The United States District Court For The Western District Of Virginia, Danville Division Filed June 27, 2005 ..... 25a

Appendix D — Excerpts From Transcript Of Trial Proceedings Dated June 13, 2005 ..... 46a

Appendix E — Excerpts From Transcript Of Trial Proceedings Dated May 27, 2005 ..... 48a

Appendix F — Order Of The United States District Court For The Western District Of Virginia, Danville Division Dated And Filed August 25, 2004 ..... 51a

Appendix G — Order Of The United States District Court For The Western District Of Virginia, Danville Division Dated And Filed August 4, 2004 ..... 53a

Appendices

Page

Appendix H — Report And Recommendation Of The United States District Court For The Western District Of Virginia, Danville Division Dated And Filed June 28, 2004 ..... 55a

Appendix I — Report And Recommendation Of The United States District Court For The Western District Of Virginia, Danville Division Dated And Filed June 21, 2004 ..... 73a

Appendix J — Order Of The United States Court Of Appeals For The Fourth Circuit Denying Petition For Rehearing Filed August 28, 2007 ..... 98a

Appendix K — Excerpted Transcript Of Proceedings Before Honorable Norman K. Moon Dated June 8, 2005 ..... 100a

Appendix L — Statute And Rule Involved 106a

TABLE OF CITED AUTHORITIES

Page

Cases

Alevromagiros v. Hechinger Co., 993 F.2d 417 (1993) 7, 29

Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993) ..... *passim*

Erie Co. v. Tompkins, 304 U.S. 64 (1938) 23, 30

Ford Motor Co. v. Bartholomew, 224 Va. 421 (1982) ..... *passim*

Kumho Tire Co. v. Carmichael, 526 U.S. 137 (1999) 6, 23, 24

In re Paoli R. Yard PCB Litigation, C.A.3d 1990, 916 F.2d 829 25

Redman v. John D. Brush & Co., 111 F.3d 1174 (1997) 28

Sexton v. Bell Helmets, Inc., 926 F.2d 331 (applying Kentucky law), *cert denied*, 502 U.S. 820 (1991) ..... *passim*

Page

Statutes, Rules and Other Authorities

28 U.S.C. § 1254(1) 1

28 U.S.C. § 1652 ..... ii, 2, 28

Federal Rule of Civil Procedure 50(a)(1) ii

Federal Rule of Evidence 401 22

Federal Rule of Evidence 702 ..... *passim*

Restatement (Second) of Torts, § 402A 22, 28, 29

Virginia Model Jury Instruction: Civil, No. 2.020 20

Virginia Practice: Products Liability (2005 ed.) 29

Wright & Gold, Federal Practice and Procedure: Evidence § 6266 ..... 18, 19, 21, 26

Craig, *When Daubert gets Erie: Medical Certainty and Medical Expert Testimony in Federal Court*, 77 Denv. U.L. Rev. 69 (1999-2000) 22

PETITION FOR A WRIT OF CERTIORARI

Petitioner respectfully petitions for a writ of certiorari to review the judgment of the United States Court of Appeals for the Fourth Circuit in this case.

OPINIONS BELOW

The magistrate judge reports and recommendations of June 28, 2004 (Appendix ("Pet. App.") 55a-72a) and June 21, 2004 (Pet. App. 73a-97a) (per Urbanski, M.J.) concerning the Respondent's motion to exclude expert testimony and motion for summary judgment, respectively, are not otherwise published. The district court orders adopting the magistrate judge reports and recommendations (Pet. App. 52a, 53a-54a) are not otherwise published. The district court opinion (Pet. App. 24a-45a) (per Moon, D.J.) granting Respondent's motions to strike expert testimony and direct a verdict is not otherwise published. The district court opinion (Pet. App. 12a-24a) (per Moon, D.J.) denying Petitioner's motion for a new trial is not otherwise published. The court of appeals *per curiam* opinion (Pet. App. 1a-11a) affirming the district court is not otherwise published. The court of appeals order of August 28, 2007 denying rehearing and hearing en banc (Pet. App. 98a-99a) is not otherwise published.

STATEMENT OF JURISDICTION

The court of appeals entered its opinion and order on August 1, 2007, and denied rehearing and rehearing en banc on August 28, 2007. Petitioner invokes this Court's jurisdiction under 28 U.S.C. § 1254(1).

STATUTORY PROVISIONS INVOLVED

The provisions of Federal Rule of Evidence 702 and 28 U.S.C. § 1652 are relevant to this petition and are reprinted in the Appendix at 106a.

STATEMENT OF THE CASE

In this diversity of citizenship action arising under Virginia law, Petitioner's product liability complaint alleged that the 1999 Ford Mustang was defective and unreasonably dangerous for foreseeable collisions because it was not equipped with a battery disconnect (BCO) to eliminate a collision damaged dashboard wiring harness as an ignition source for a post-collision fire. Petitioner was a passenger in a frontal collision of a 1999 Mustang with a utility pole. Before he could be removed, the fire spread from the dashboard wiring harness throughout the occupant compartment. He suffered serious burns requiring above the knee amputations of both legs. Petitioner sought to prove his case through the testimony of a design defect expert, automotive engineer Jerry Wallingford.

Wallingford testified that in his opinion the 1999 Mustang was unreasonably dangerous for its ordinary intended use and foreseeable misuse because it was not equipped with a BCO which would have prevented the fire in Petitioner's foreseeable collision.[1] He pointed out

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[1] Q. Now, Mr. Wallingford, with respect to the 1999 Mustang involved in this case, do you have an opinion to a reasonable degree of engineering certainty as to whether or not that

(Cont'd)

(Cont'd)

Mustang was unreasonably dangerous for its ordinary and intended use and its foreseeable misuse when it was manufactured and distributed in March of 1999?

A. Yes, sir, I do.

Q. And what is that opinion?

A. That it was unreasonably dangerous, because it was foreseeable that the subject vehicle, as manufactured, could be involved in collisions that could result in an electrical-generated fire that could and would result in post-collision fires that would injure or kill people.

Q. And based upon your review of the materials that you have covered, what devices were available to prevent the fire that you have described and have investigated?

A. We have talked about certainly different devices. The one that we have talked about to the greatest extent is the First Inertia type, mechanical inertia device, what Ford – or what First Inertia calls the 500-series switch. It, in combination with the other systems that we have tested and I have described to you today as part of Verifact prototype testing and prototype installation and/or in combination with systems that are energized by the Ford S3 system, energized by the restraint module as opposed to the First Inertia type, which is purely mechanical, and the third type that we talked about was the pyrotechnic type that was on the BMW, the one that had a cable that was separated in two by a small explosive charge.

(Cont'd)

that there are no government or industry standards applicable to the electrical systems of motor vehicles. His opinion therefore was based upon an exposition of the history of damaged electrical components as ignition sources for post-collision fires and BCOs as a safety device to prevent them, including a review of government, industry, battery disconnect manufacturer, and Ford studies over the past 30 years about the feasibility, cost, and utility of battery disconnects to reduce deaths and injuries from post-collision fires. He gave particular attention to the National Highway and Traffic Administration's consideration of the need for a government standard for motor vehicle electrical systems in 1970, 1975 and 1995. He testified about successful crash tests of the device by a NHTSA contractor and BCO manufacturers and the concerns expressed to NHTSA by the Motor Vehicle Manufacturers Association, Ford, and other manufacturers about the risks associated with using such a device. He also reviewed the comments of BCO manufacturers to NHTSA about how those risks could be eliminated. With respect to the particular fire hazard at issue in this case he pointed out that the National Fire Protection Association identified dashboard wiring harnesses as an ignition source for occupant compartment fires in its 1995 edition of NFPA 921 and

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(Cont'd)

> Any of those three were technologically and economically feasible in 1999 and could have been manufactured by Ford Motor Company and placed on all of their vehicles, not just the Mustang vehicles.

JA 3444(8) – 3445(15)

the National Highway and Traffic Administration's 1995 request (addressing what it called the "Fire Problem") that motor vehicle manufacturers comment on battery shut-off devices as a means of eliminating damaged electrical components as ignition sources for post-collision fires which expose trapped occupants to the risk of death or serious burn injuries. Pet. App. 64a-66a, 74a-76a, 81a, 82a.

In addition to this exposition, Wallingford based his opinion on the fact that Ford-owned Jaguar has been equipped with an impact activated inertia switch as a battery power disconnect since 1988 as well as BMW.[2] Finally, he designed, tested, and equipped a 1999 Mustang with a prototype battery disconnect switch using the same impact activated inertia switch used by Ford for over 20 years to disconnect electronic fuel pumps in collisions and by Jaguar since at least 1988 to disconnect battery power in collisions to all but critical circuits. Wallingford's switch eliminated all the risks that had been identified by motor vehicle manufacturers in filings through 1999 with The National Highway Safety and Traffic Administration concerning equipping motor vehicles with impact activated battery disconnects. Wallingford's BCO disconnected all battery power upon impact except for hazard flashers, power door locks, and power windows. *Id.*

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[2] Petitioner also called J. Samuel McKnight, PhD., who testified in detail about the BCO used by Jaguar including two 1988 models which, atypically for Jaguar, located the battery under the hood instead of in the trunk. Mc Knight explained that Jaguar uses an inertia switch with a relay/solenoid to disconnect the battery power to almost all circuits in a collision, including all the circuits in the dash, while critical circuits such as power door locks are left operational. JA 5312-5858.251.

The admissibility of Wallingford's opinions under Federal Rule of Evidence 702 was challenged by Ford's pretrial *Daubert* motion contending, *inter alia*, that Wallingford's failure to perform a risk-benefit analysis demonstrating that the benefits of a BCO exceeded the risks required exclusion of his testimony.

The magistrate judge recommended that Ford's motion to exclude Wallingford's testimony be denied: "[I]n sum, . . ." Wallingford's opinions ". . . clearly meet the *Daubert* and *Kumho Tire* tests for reliability" because "[N]ot only has Wallingford studied National Highway Traffic and Safety Administration ("NHTSA"), Ford and industry literature regarding the availability and testing of battery disconnect devices dating back to the 1970s, he installed a battery disconnect system in an exemplar 1999 Mustang GT using the same switch Ford uses to disconnect the fuel pump in the case of impact and other commercially available components" and "Wallingford also subjected his design to certain limited testing." Pet. App. 64a-66a. The district court adopted the magistrate judge recommendation with respect to Wallingford's testimony in its entirety. Pet. App. 54a.

The sufficiency of Wallingford's testimony to satisfy Petitioner's burden of proof under Virginia law was tested by Ford's motion for summary judgment. The magistrate judge recommended that Ford's motion for summary judgment be denied observing that Wallingford's evidence relied upon data and employed analysis endorsed by the Supreme Court of Virginia in *Ford Motor Co. v. Bartholomew*, 224 Va. 421, 297 S.E.2d 675, (1982) and the United States Court of Appeals for

the Fourth Circuit in *Alevromagiros v. Hechinger Co.*, 993 F.2d 417 (1993) and *Sexton v. Bell Helmets*, 926 F.2d 331 (applying Kentucky law), cert denied, 502 U.S. 820 (1991) for proving a design defect where no government or industry standards apply. Pet. App. 81a-89a. As to the sufficiency of Wallingford's testimony on the issue of reasonable consumer expectations discussed in *Alevromagiros* and *Sexton* the recommendation stated: "[A]s Tunnell has provided sufficient evidence from which a jury could conclude that that (sic) such a consumer expectation was reasonable, the court agrees and finds summary judgment not to be appropriate." Pet. App. 91a. In adopting the entire report and recommendation with respect to Wallingford the district court stated "the Court believes that the testimony of Plaintiff's engineering expert, Jerry Wallingford, creates an issue of material fact as to whether reasonable consumers would have expected the vehicle at issue – a 1999 Ford Mustang GT – to be equipped with a battery disconnect device." Pet. App. 52a.

Owing to Ford's history of discovery misconduct in this case, particularly the bad faith failure to produce an internal Ford document entitled "Collision, Non-Collision Fire Prevention Report," the magistrate judge recommended on October 25, 2004 that, *inter alia*, a sanction be entered against Ford pursuant to Federal Rule of Civil Procedure 37(b), *viz:* "The jury be instructed that the following fact be established: Whether in a collision or non-collision context, consumers expected that there should be "No fires!" in passenger automobiles as of 1988."

Prior to opening statements on Friday morning May 27, 2005, the district court ruled on the magistrate judge report and recommendation of October 25, 2004 and held that Petitioner's evidence on the consumer expectation issue was sufficient as a matter of law to sanction Ford for its discovery misconduct. Pet. App. 49a.

On direct examination, Wallingford testified that the prototype BCO left hazard flashers, power windows, and power door locks operational following a collision. Wallingford was cross-examined about whether other circuits should remain operational: interior lights, horn, radio, power point, glove compartment light, and trunk light. Hypothetical scenarios about the potential consequences of disconnecting battery power to these circuits were posed to Wallingford and he was asked if he had performed risk-benefit tests with respect to these circuits. Wallingford responded that he had not performed any analysis as to whether or not these circuits should also remain operational following a crash. Pet. App. 34a. He relied upon the published comments of motor vehicle manufacturers and BCO manufacturers through 1999 to identify the safety circuits that should remain operational following a collision. JA 5354.

Wallingford was also cross-examined about a portion of one of his three discovery depositions in this case. Pet. App. 29a-31a. The cross examination did not allow Wallingford to place the selected deposition testimony in context. *Id.* at 102a. On redirect examination, Wallingford reviewed the deposition testimony that preceded and followed the portion of the deposition selected for cross examination. *Id.* In the deposition testimony Wallingford was asked questions about

"Fords on this list", which did not include the 1999 Mustang, and motor vehicles generally. He testified that the "Ford's on this list" and motor vehicles generally would be "safer" with BCOs but that he could not call them all "defective." *Id.* at 102a-104a. When asked specifically about the 1999 Mustang (whose electrical system he had studied in detail) he testified in his deposition as he had on direct examination that the 1999 Mustang was unreasonably dangerous for foreseeable post-collision fires because it was not equipped with a BCO. *Id.* at 105a.

Petitioner rested on June 11, 2005 and Ford renewed its pretrial motion to strike Wallingford's testimony on the same grounds argued and rejected in the pre-trial *Daubert* motion: that Wallingford should have performed a risk benefit test for a BCO and risk benefit tests with respect to the circuits he chose to leave operational on the prototype BCO. Ford also requested the court direct a verdict in its favor contending that without Wallingford's testimony Petitioner would be unable to establish that the 1999 Mustang was unreasonably dangerous. Petitioner responded that his case had been held sufficient as a matter of law as a sanction for Ford's misconduct and that balancing the risks and benefits of the BCO was a jury issue as previously held by the court.

On June 13, 2005, the district court reversed all its prior rulings with respect to the testimony of Wallingford and granted Ford's motion for directed verdict in a bench ruling stating

> ". . . because there's no legally sufficient evidentiary basis for a reasonable jury to find

> that the vehicle was unreasonably dangerous, and for other defects, but that's essential it – Mr. Wallingford's opinion did not meet the legally sufficient standard – therefore, the Court grants the defendant's motion for a judgment as a matter of law."

Pet. App. 46a-47a.

On June 27, 2005, the district court entered an order and filed a memorandum opinion striking Wallingford's "defectiveness" testimony. The court reviewed its understanding of *Daubert* with particular reliance upon the Court's holding that the "gatekeeping" analysis is a "flexible one" and that "many factors will bear on the inquiry." Pet. App. 28a-29a.

At the outset the district court decided the weight and credibility of Wallingford's trial testimony by contrasting his direct examination conclusion that the 1999 Mustang was defective and unreasonably dangerous to deposition testimony brought out on cross-examination that all vehicles would be "safer" with a BCO but that he could not necessarily call all vehicles "defective" because they did not have a BCO. Pet. App. 29a-31a. In the deposition testimony, like his direct testimony, he stated that the 1999 Mustang was unreasonably dangerous for foreseeable post-collision fires because it was not equipped with a BCO. *See*, p. 3 & note 1 *infra.*; Pet. App. 105a. The district court nevertheless concluded that because Wallingford commented that all vehicles would be "safer" with a BCO, but not necessarily defective, that he "explicitly rejected the notion that the 1999 Mustang at issue was defective

"thus rendering his entire testimony irrelevant, citing *Sexton v. Bell Helmets, Inc.*, 926 F. 2d 331, 336 (1991) (applying Kentucky law). Pet. App. 31a-33a. The district court's determination that Wallingford's testimony should be stricken as irrelevant was, therefore, reached by deciding the weight and credibility of Wallingford's testimony before a jury and applying Kentucky law instead of Virginia law.

As to the reliability inquiry the district court said ". . . Wallingford's testimony demonstrated that he had no scientifically valid methodology for coming to his conclusions regarding defectiveness." Pet. App. 33a. The district court did not undertake to evaluate whether Wallingford's exposition about post-collision fires and fire prevention devices, as opposed to a scientific methodology, was pertinent to reliability. Instead, the district court held that Wallingford's testimony was unreliable because he did not perform a "quantitative" analysis establishing that the safety benefits of using the BCO were greater than the risks. Furthermore, his testimony was unreliable because he had not performed a risk benefit test to discover hypothetical risks brought out on cross examination arising from the disconnection of circuits like the dome light, trunk light, glove compartment light, horn, cigarette lighter, and power point. Pet. App. 33a-34a. The district court opinion is silent about whether there is sufficient data confirming the hypothetical safety concerns raised with Wallingford on his cross examination about these circuits or an available risk benefit test to identify the nature and extent of any safety risk. The district court opinion is

also silent about any scientific, technical, or engineering source for the proposition it adopted and applied to Wallingford's testimony that a quantitative risk benefit analysis is the *sine qua non* for determining the reliability of the analysis of an automotive design engineer. The only evidence about the feasibility and reliability of a risk benefit test comes from General Motors comment about the one it attempted in 1975: "[A]s in the case of assessing the benefit of an electrical cutoff switch, no methodology exists which can accurately assess the hazard associated with deactivating the vehicle's electrical power during a collision." JA 4672-73. The district court opted to exclude Wallingford's testimony for failure to use a questionable methodology.

Finally, the district court ruled that "[W]allingford's methods for determining that the Mustang was defective also fail many of the explicit factors regarding expert opinion established through *Daubert* and its progeny": no evidence of peer review, error rate, or general acceptance and he prepared his analysis for litigation purposes only. Pet. App. 34a-35a. The district court simply recited the criteria. There was neither an articulation of a nexus between the *Daubert* factors and the discipline at issue in this case nor consideration of whether Wallingford's exposition in conjunction with design and testing of a BCO were pertinent to reliability. *Id.*

With Wallingford's testimony stricken, Ford's motion for a directed verdict was granted "[B]ecause the Court agrees that Plaintiff cannot establish a necessary element of Plaintiff's cause of action." Pet. App. 25a. "[S]pecifically, Plaintiff has not provided legally

sufficient evidence to demonstrate that Plaintiff's proposed BCO satisfies the risk-benefit analysis; namely, that the BCO taken as a whole would have provided safety benefits that outweighed its safety risks." Pet. App. 36a-37a. The district court opinion cited no authority for its holding. *Id.*

In the memorandum opinion denying Petitioner's motion for new trial, the district court agreed with Petitioner that no decision by the Virginia Supreme Court or any federal court applying Virginia law required as an element of proof that the benefits of a proposed alternative design exceeded the risks of use. Pet. App. 18a-19a. However, the district court sought to distinguish the Virginia Supreme Court decision in *Ford v. Bartholomew*, supra, and the several federal court decisions applying Virginia law cited by Petitioner, on the grounds that the manufacturers in those cases had not argued that the risks of the proposed alternative designs exceeded their benefits. Pet. App. 20a-21a. According to the district court, under Virginia law "[U]ltimately, the necessity of establishing that a proposed alternative design would satisfy the risk-benefit analysis is a matter of common sense. When a defendant argues that a proposed alternative device imposes safety risks, a plaintiff necessarily must produce some evidence that the proposed device will help more that it hurts." Pet. App. 21a. The district court cited no authority under Virginia law, or any other jurisdiction, that a defendant in a products liability case, or any other case, can either create a burden of proof or shift the burden of proof by a mere argument. *Id.*

The district court revisited Wallingford's deposition testimony in denying Petitioner's motion for new trial. The district court rejected outright Wallingford's direct trial testimony, concluded that his discovery deposition opinion was inadequate, and reaffirmed its earlier decision to strike all of his evidence as irrelevant. Pet. App. 14a-16a. Petitioner filed his notice of appeal on September 30, 2005.

The Fourth Circuit affirmed by *per curiam* opinion of August 1, 2007. Wallingford's entire testimony was found to be "irrelevant" under Rule 702 because he "failed to testify unequivocally "about his conclusion that the 1999 Mustang was unreasonably dangerous. Like the district court, the court of appeals determined relevance by weighing the evidence and deciding credibility by comparing direct testimony and his cross examination about a discovery deposition. Pet. App. 6a. The court of appeals also relied upon *Sexton v. Bell Helmets, Inc.*, 993 F. 2d 331, 336 (1991) (applying Kentucky law) to determine the relevance of Wallingford's opinion. The court concluded that his testimony was irrelevant because it had no tendency to establish that a reasonable consumer would expect that Ford would place a BCO on its 1999 Mustang. *Id.*

The Fourth Circuit found Wallingford's testimony unreliable for his failure to perform "more extensive testing" with respect to the safety benefits of circuits brought to Wallingford's attention on cross examination which he had not excluded from the operation of his prototype BCO. Wallingford's "BCO solution" was also found deficient for lack of "peer review" and "general acceptance." Pet. App. 7a-8a. The court of appeals gave

no consideration to whether Wallingford's exposition about post-collision fires and BCOs as a fire prevention safety device was pertinent to reliability. *Id.* Three *Daubert* factors were simply applied carte blanche without identification of a nexus between those factors and the expert discipline at issue in this case. *Id.*

First, as to the "testing" factor, the court of appeals accepted at face value the point that Ford was trying to make on cross examination: Wallingford should have performed risk-benefit tests to determine if more circuits should remain operational than just hazard lights, power door locks, and power windows. *Id.* The court of appeals opinion suffers from the same flaw as the district court opinion: nothing in the record of this case establishes the feasibility and reliability of a risk benefit test. To the contrary, the record establishes that a risk benefit test is not a reliable methodology. *See*, p. 12, *infra*. Nevertheless, both the court of appeals and the trial court use the judge mandated risk-benefit test as the standard for determining the admissibility of Wallingford's evidence.

Second, as to the "peer review" and "general acceptance" factors of *Daubert*, the court of appeals gave no consideration to other pertinent reliability facts: the BCO has been discussed as a reliable safety device for thirty years and used on two production vehicles (Jaguar and BMW) since 1988. If these facts do not squarely meet the peer review and general acceptance criteria, as initially ruled by the trial court, they arguably have either enhanced or equivalent reliability to publication

in an unidentified peer review journal or general acceptance.[3] Surely the reliability of these facts merited consideration.

The directed verdict was affirmed on the grounds that Petitioner was required to establish that the benefits of the BCO exceeded the risks in order to meet his burden to prove that a reasonable consumer would have expected Ford to equip its Mustang with a BCO. Pet. App. 9a-10a. Like the district court, the Fourth Circuit cited no Virginia authority or authority from any other jurisdiction to support its holding.

Glaringly omitted from the Fourth Circuit's opinion was recognition that *Ford Motor Co. v. Bartholomew*, 224 Va. 421 (1982) provided the rule of decision for this case. In *Bartholomew*, where the plaintiff alleged that Ford's 1973 Lincoln was unreasonably dangerous for failure to incorporate a design that prevented the transmission from indicating "Park" when, in fact, it was not, the Virginia Supreme Court held: "Absent an established norm in the industry (either a government or industry standard) it was a matter of opinion of trained experts what design was safe for its intended use" and that the sources of proof and methods of expert analysis sufficient to proof an unsafe design were "data compiled

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[3] The difficulty in applying the *Daubert* factors without articulating a nexus of those factors with the issues in the case is illustrated by the court of appeals opinion. For example, how long does the feasibility and utility of a safety device need to be studied before it is "generally accepted" and how many vehicles must be equipped with the device before the "general acceptance" factor is satisfied?

by the National Highway Traffic Safety Administration," consultation with other experts, "experiments" with the system at issue, evaluation of systems on other vehicles, "disassembly and assembly" of the components in question, and use of "mockups" to explain the testimony. *Id.* at 430. Neither the plaintiff in *Bartholomew* nor plaintiffs in any other decisions by the Virginia Supreme Court were required to prove that a proposed alternative design either satisfied reasonable consumer expectations or a risk-benefit test.

This petition for a writ of certiorari followed.

REASONS FOR GRANTING THE PETITION

The petition should be granted for two reasons. *First*, the United States Court of Appeals for the Fourth Circuit has decided an important question of federal law that has not, but should be, settled by this Court: whether a trial court's discretion to determine relevance and reliability as the gatekeeper under Federal Rule of Evidence 702 includes weighing the trial testimony of an expert and then striking it as irrelevant, because of a perceived inconsistency and no tendency under state substantive law to show reasonable consumer expectations, and unreliable, for failure to meet a judge mandated test and *Daubert* criteria applied to hypothetical issues raised on cross-examination without considering other criteria pertinent to reliability or whether the *Daubert* criteria fit the issues raised.

Second, the Fourth Circuit's judgment that Kentucky law was controlling instead of Virginia law, which affirmed a district court judgment that cited no

authority for its rule of decision, violates the Rule of Decision Act and so far departs from the usual course of judicial proceedings as to call for an exercise of this Court's supervisory power.

I. The Decision Below Decided An Important Question Of Federal Law – The Scope of A Trial Court's Gatekeeping Discretion Under Federal Rule of Evidence 702 – That Has Not, But Should Be, Settled By This Court.

The overarching unanswered question arising from the *Daubert* trilogy and the enactment of the 2000 Amendment to Federal Rule of Evidence 702 (Pet. App. 106a) is what is the boundary between the discretion of the gatekeeper to decide the relevance and reliability of expert testimony and preserving the traditional power of the jury to weigh the evidence and determine the credibility of the witnesses. *See, Wright & Gold, Federal Practice and Procedure: Evidence § 6266*, at 287-88. Read broadly, the Court's directive to trial courts in *Daubert* to determine the relevance and reliability of expert testimony requires a trial court to consider all matters touching on those inquiries as questions of admissibility rather than weight. *See, Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 589 (1993) ("[U]nder the Rules the trial judge must ensure that any and all scientific testimony or evidence admitted is not only relevant, but reliable."); and *Wright & Gold, Id.* Such a reading has the potential to undermine the "policy underlying Rule 702 and the balance of power between the judge and the jury. " *Id.* at 288-89. In light of the importance of expert evidence in both civil and criminal proceedings, resolution of this boundary dispute is critically important.

The Fourth Circuit and the trial court read the Court's *Daubert* directive broadly. Relevance encompassed scrutinizing the trial testimony of Petitioner's expert for inconsistencies and applying the substantive law of Kentucky, instead of Virginia. Pet. App. 31a-33a; 6a. Reliability included subjecting the expert's cross-examination testimony to a judge mandated test (the risk-benefit test) and applying the *Daubert* criteria to answers to hypothetical questions. Pet. App. 33a-34a; 7a-8a. However, the Fourth Circuit's and trial court's broad view of discretion did not include addressing the reliability criteria in the expert's methodology, or considering whether the *Daubert* criteria fit the issues raised in the cross examination, or considering whether other criteria were pertinent to reliability, or whether any concerns about the reliability of the expert's methodology raised in the cross examination were too complex for the jury to weigh.[4] *See,* pp. 14-16 *infra.*

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[4] "[D]aubert should not be applied where, after cross-examination and rebuttal evidence, reliability questions raised by an expert's methodology or theories are not so complex as to exhaust the jury's comprehension. In such cases, it makes sense to let the jury hear the expert's testimony and determine what weight to give it."

Wright & Gold, Federal Practice and Procedure: Evidence § 6266 at 292-93. An exception exists where the trial judge concludes that the jury is not likely to scrutinize the expert testimony "because it is overly impressed" with the expert. *See, Daubert,* 509 U.S. at 595.

Without consideration of these factors, there are few barriers to an extension of the gatekeeping boundary well into the territory reserved for the jury—an extension that could potentially occupy the whole territory that has been traditionally reserved to the jury—an extension that could effectively do away with the right to jury trial guaranteed by the Seventh Amendment in cases requiring expert evidence. The Fourth Circuit's opinion in this case illustrates the extent to which a court's gatekeeping discretion can supplant the role of the jury.

A. Certiorari Is Warranted Because The Decision Below Decided That The Relevancy Inquiry Mandated by *Daubert* Permits Exclusion of Expert Testimony At Trial Based Upon Perceived Inconsistencies And This Court Has Not Decided The Boundary Between The Gatekeeper's Role In Weighing Inconsistent Testimony And The Traditional Role Of The Jury.

In *Daubert* this Court suggested, but did not decide, that weighing inconsistent testimony would remain in the domain of the jury: "Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shakey but admissable evidence. The standard jury instruction provides: "You are the judges of the facts, the credibility of the witnesses, and the weight of the evidence. You may consider ... their prior inconsistent statements ... as to any material fact in the case." *Virginia Model Jury Instructions: Civil, No.* 2.020.

In this case, the prior inconsistent statement seized upon by both the trial court and the Fourth Circuit, found to be so only by considerable parsing, was held to be determinative of the gatekeeper relevance inquiry. Pet. App. 29a-33a, 15a-16a, and 6a. One perceived inconsistency wiped out the entire dissertation of the expert about the history of damaged electrical components serving as ignition sources for post-collision fires and the feasibility and utility of battery disconnect devices to prevent those fires.

The rationale of the Fourth Circuit with respect to the relevancy inquiry of the gatekeeper poses an astounding threat to the right to jury trial. This Court should now draw the line: the gatekeeper determines relevancy based upon the subject matter of the expert's testimony and any inconsistency in the presentation of that subject matter at trial is left for the jury to weigh.

B. Certiorari Is Warranted Because The Decision Below Decided That Kentucky Law Was Appropriate For Determining The Relevancy Of Expert Testimony Instead Of Virginia Law And This Court Has Not Decided The Role State Substantive Law Plays In The Gatekeeper's Determination of Relevancy And Reliability Mandated by *Daubert.*

The Federal Rules of Evidence were enacted directly by Congress. As such, it is generally acknowledged that they are not subject to the Rules of Decision Act or the Rules Enabling Act. *Wright & Gold, supra.*, § 4512 at 414, however, "this Court has not decided how the *Erie* doctrine and the Federal Rules of Evidence

interact" and "many courts of appeals have decided that some state evidentiary rules are so substantive that federal courts sitting in diversity cases must take account of them." Craig, *When Daubert Gets Erie: Medical Certainty and Medical Expert Testimony in Federal Court*, 77 Denv. U. L. Rev. 69 (1999-2000).

Federal Rule of Evidence 401 defines relevant evidence as "evidence having any tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence." It therefore seems beyond dispute that in diversity of citizenship cases the applicable substantive state law must be correctly decided upon before undertaking to decide what evidence, including expert testimony, is relevant to the action.

The Virginia Supreme Court decision in *Ford Motor Company, Inc. v. Bartholomew* is squarely on point to the issues in this Virginia product liability action. *See*, p. 16, *infra*. Nonetheless, the Fourth Circuit relied upon its decision in *Sexton*, applying Kentucky's adoption of *§ 402A Restatement (Second) of Torts*, to determine the relevance of expert testimony arising under Virginia law. Pet. App. 6a.

It seems obvious in this case that Virginia law should be the reference for determining relevancy and not Kentucky law, but the Fourth Circuit did not see it that way and this Court has not decided the role of substantive state law when the gatekeeper is performing the relevancy inquiry mandated by *Daubert* for the determination of the admissibility of expert evidence.

There is good reason to do so in this case because the Fourth Circuit's reliance on Kentucky law must either be in conflict with *Erie* or an abuse of discretion under *Daubert*, supra. *See, Erie Co. v. Tompkins*, 304 U.S. 64 (1938).

Moreover, Wallingford's testimony was on all fours with the sources and methods of proof for motor vehicle design defect cases established by the Virginia Supreme Court in *Bartholomew*. *See,* p. 16 *infra.* That being the case, the question arises as to whether Virginia's controlling product liability law is so "bound up" with evidentiary elements that it must considered in a diversity action under the *Erie* doctrine. At a minimum, Virginia's substantive law should have been considered as a pertinent reliability factor. *See, Kumho Tire,* 526 U.S. at 157.

C. Certiorari Is Warranted Because the Decision Below Decided That Consideration of Pertinent Criteria By The Gatekeeper Other Than The *Daubert* Criteria Was Not Necessary To Determine Reliability, That A Judge Mandated Scientific Test Is Appropriate To Determine Reliability, And This Court Has Not Decided Whether Failure To Consider Other Pertinent Criteria And Determining Reliability Based Upon A Judge Mandated Test Constitute Abuses Of Gatekeeping Discretion.

The Court has suggested, but has not decided, that a trial court might commit an abuse of discretion if it inflexibly applies the *Daubert* criteria without

consideration of other criteria pertinent to reliability. *See, Kumho Tire v. Carmichael*, 526 U.S. 137, 157 (1999). The Fourth Circuit's opinion demonstrates the imperative for this Court to decide this issue.

In this case, Wallingford's testimony took the form of an exposition or dissertation. This form of evidence has long standing recognition as reliable. The Original Advisory Committee's Notes to the 1975 enactment of Rule 702 observed:

> Most of the literature assumes that experts testify only in the form of opinions. The assumption is logically unfounded. The rule accordingly recognizes that an expert on the stand may give a dissertation or exposition of scientific or other principles relevant to the case, leaving the trier of fact to apply them to the facts.

Wallingford's testimony was in large measure provided to educate the jury about the electrical causes of post-collision motor vehicle fires and available safety devices to prevent them including the long history of the consideration of these subjects by the government, motor vehicle manufacturers generally, Ford specifically, and the manufacturers of BCOs. With respect to this kind of evidence the Advisory Committee's Note to 2000 Amendment to Rule 702 observed:

> [T]he amendment does not alter the venerable practice of using expert testimony to educate the factfinder on general principles. For this kind of generalized testimony, Rule

> 702 simply requires that: (1) the expert be qualified; (2) the testimony address a subject matter on which the factfinder can be assisted by an expert; (3) the testimony be reliable; and (4) the testimony "fit" the facts of the case.

There was no dispute about Wallingford's qualifications. His testimony addressed a subject matter on which the jury could be assisted. There is no dispute that the content of his dissertation was reliable. His testimony clearly "fit" the facts of this case. Even if it is assumed that Wallingford's ultimate opinion was flawed in some respect, his dissertation clearly "fit" the facts of the case. This dissertation was clearly admissable.

The Fourth Circuit did not consider whether the NHTSA, Ford, Motor Vehicle Manufacturer Association, and BCO manufacturer materials reviewed exhaustively by Wallingford were a reliable substitute for *Daubert's* peer review criterion. The same is true for the crash test results described in NHTSA and BCO manufacturer reports with respect to the *Daubert* testing criterion. *See* pp. 14-16 *infra.*

The Fourth Circuit did not consider the reliability factors set forth in *Ford Motor Company, Inc. v. Bartholomew* where the Virginia Supreme Court identified sources of proof and methods of analysis for motor vehicle design defect cases where no government or industry standards apply. *Id. Bartholomew* describes an accepted methodology and Wallingford's presentation certainly tracked it. *See, In re Paoli R. Yard PCB Litigation,* C.A.3d, 1990, 916 F.2d 829, 858 ("if the

challenged (testimony) is more accurately described as an application of an accepted methodology, it is not the proper subject of a Rule 702-based exclusion, but rather the subject of cross-examination of the expert and resolution by the jury").

Besides the judge mandated risk-benefit test, the only reliability criteria considered by the Fourth Circuit were the *Daubert* criteria which were inflexibly and artificially applied to this case. *See.* p. 12 *infra.*

The only protection against the *Daubert* criteria becoming the new *Frye*-general acceptance test, through their inflexible application, is to require the gatekeepers to articulate a nexus between the *Daubert* criteria and the subject matter at issue and to further require that other criteria of reliability be considered. *See, Wright & Gold, supra., § 6266 [Retitled]* at 63.

The trial court held that Wallingford was required to perform a "quantitative" risk-benefit test with respect to the BCO, and also the individual circuits brought to his attention on cross examination, as the essential precondition to admitting any of his testimony. Otherwise, his evidence failed the "testing" criteria of *Daubert.* Pet. App. 33a-34a. The Fourth Circuit likewise held that such risk-benefit testing was required to meet the "testing" requirement of *Daubert.* Pet. App. 7a-8a.

To exclude an expert's testimony for his failure to test scenarios first appearing in the record of the case during cross-examination defeats the whole purpose of Rule 702 to evaluate expert testimony based upon proven scientific or technical knowledge. There is no proof, in

the record of this case, that a risk-benefit test exists to test the scenarios which were the subject of Wallingford's cross-examination. *See* p. 12 *infra.*

In sum, the Fourth Circuit affirmed the exclusion of Wallingford's testimony as unreliable based upon a judge created test, which itself lacked any indicia of reliability, without consideration of the reliability criteria established by state law demonstrated by Wallingford's expository presentation of historical and technical data about post-collision fires caused by damaged electrical components and the means to prevent them. Certiorari should be granted for this Court to rule that gatekeepers abuse their discretion when they apply such tests as a part of the reliability inquiry mandated by *Daubert* and fail to consider other criteria pertinent to reliability.

II. The Decision Below Violates The Rules Of Decision Act And So Far Departs From The Accepted And Usual Course Of Judicial Proceedings, And Sanctions Such A Departure By A Lower Court, To Call For An Exercise Of This Court's Supervisory Power.

The district court rule of decision was

> "[P]laintiff cannot establish the first essential element of a breach of warranty cause of action. Specifically, Plaintiff has not provided legally sufficient evidence to demonstrate that Plaintiff's proposed BCO satisfies the risk-benefit analysis; namely, that the BCO taken as a whole would have provided safety benefits that outweighed its safety risks."

Pet. App. 25a, 36a-37a.

The Rules of Decision Act, 28 U.S.C. § 1652, provides that "The laws of the several states . . . shall be regarded as the rules of decision in civil actions in the court of the United States, in cases where they apply." Pet. App. 106a. Ford *Motor Company, Inc. v. Bartholomew*, supra, was unquestionably the rule of decision for this case and under the applicable rule of decision the Petitioner had no burden to prove that the benefits of the proposed BCO outweighed the risks. *See*, p. 14 *infra*. The district court opinion made no mention of *Bartholomew* or any other decision of the Virginia Supreme Court to support its holding that passage of a risk-benefit test was the "first essential element" of proof in a Virginia breach of warranty cause of action. The district court ruling was a patent violation of The Rules of Decision Act.

Nonetheless, the Fourth Circuit affirmed and like the district court, cite no decision of the Virginia Supreme Court to support its holding that "Because Tunnell's evidence did not show the risks associated with a power cutoff were out weighed by the benefits from a decreased possibility of post-collision electrical fires, the district court correctly granted Ford's motion for a directed verdict." Pet. App. 9a-10a.

The Fourth Circuit cited *Redman v. John D. Brush & Co.*, 111 F.3d 1174, 1181 (1997) for the proposition that "Our court has stated that such balancing (risk versus benefit) is needed to determine whether consumer expectations are reasonable." Pet. App. 9a. Page 1181 of *Redman* discusses *Sexton* where the Fourth Circuit first considered Kentucky's reasonable consumer expectations doctrine as defined in § 402A *Restatement (Second) of Torts.*

While some"[V]irginia (federal) courts have employed elements of risk-utility analysis and the consumer expectations test, the Virginia Supreme Court has never expressly adopted either of these tests as the standard for determining products liability in Virginia." *Virginia Practice: Products Liability*, (2005 ed.) at 33, n1.[5]

The district court and the Fourth Circuit have created burdens of proof that are nonexistent under

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[5] The Fourth Circuit first discussed consumer expectations in *Sexton v. Bell Helmets*, 926 F.2d 331, *cert denied*, 502 U.S. 820 (1991), a West Virginia case applying Kentucky's 1966 enactment of the reasonable consumer expectations doctrine found in § 402A of the Restatement (Second) of Torts. "Reasonable consumer expectations" first appears in the Fourth Circuit's treatment of Virginia product liability cases in *Alevromagiros v. Hechinger Co.*, 993 F.2d 417 (1993) where the court turned to its decision in *Sexton* for a standard to determine the admissibility of expert testimony in cases where the product complied with either government or industry standards but the plaintiff's expert was contending that the product was nonetheless defective. The reasonable consumer expectation doctrine, borrowed by the Fourth Circuit as a standard for admitting expert evidence, required experts to ground their challenges to the safety of such products upon actual industry practices, knowledge at the time of other injuries, knowledge of dangers, and existence of published literature. For example, the expert testimony in *Sexton* was found deficient because "[N]o literature was presented to indicate that anyone – industry, government, or consumer – recognized a need for greater protection in low impact accidents than that provided for by these standards." 926 F.2d at 338. Similarly, in *Alevromagiros*, plaintiff's expert testimony was deficient because it was not grounded in published literature or a review of industry practice. 993 F.2d at 422.

Virginia law. Such an egregious violation of The Rules of Decision Act and the *Erie* doctrine requires exercise of the Court's supervisory power.

CONCLUSION

For the foregoing reasons, the petition for a writ of certiorari should be granted.

Respectfully submitted,

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APPENDIX

APPENDIX A — OPINION OF THE UNITED STATES COURT OF APPEALS FOR THE FOURTH CIRCUIT DECIDED AUGUST 1, 2007

UNITED STATES COURT OF APPEALS FOR THE FOURTH CIRCUIT

No. 05-2112

JOHN WITTEN TUNNELL,

Plaintiff - Appellant,

versus

FORD MOTOR COMPANY,

Defendant-Appellee.

No. 06-1799

JOHN WITTEN TUNNELL,

Plaintiff - Appellant,

versus

FORD MOTOR COMPANY,

Defendant - Appellee.

Appendix A

Appeals from the United States District Court for the Western District of Virginia, at Danville. Norman K. Moon, District Judge. (CA-03-74-NKM; 4:03-cv-00074-nkm)

Argued: May 24, 2007 Decided: August 1, 2007

Before MICHAEL, Circuit Judge, WILKINS, Senior Circuit Judge, and David C. NORTON, United States District Judge for the District of South Carolina, sitting by designation.

Affirmed by unpublished per curiam opinion.

ARGUED: Fred Dempsey Smith, Jr., Martinsville, Virginia, for Appellant. Wayne D. Struble, Bowman & Brooke, L.L.P., Minneapolis, Minnesota, for Appellee. **ON BRIEF:** Robert L. Wise, Bowman & Brooke, L.L.P., Richmond, Virginia, for Appellee.

Unpublished opinions are not binding precedent in this circuit.

PER CURIAM:

This is a products liability case brought by John Witten Tunnell, a severely injured automobile passenger, against Ford Motor Company. Tunnell was injured when the Ford Mustang in which he was riding collided with a utility pole and caught fire. Tunnell claims that the Mustang was defectively designed because it did not incorporate a collision-activated switch to cut off power

to the electrical wiring that started the fire. Before the case went to the jury, the district court determined that Tunnell had not proffered sufficient evidence to show that the Mustang was defective. The court concluded that Tunnell's expert did not establish that the proposed battery cutoff switch would result in a net improvement in the Mustang's safety. For this reason, the district court ordered that the expert's testimony be excluded and that a directed verdict be entered in Ford's favor. We agree with the district court's determinations. We further agree with the district court's denial of Tunnell's request for a new trial as a sanction for Ford's discovery misconduct. The district court's orders are therefore affirmed.

I.

In November 1999 Tunnell was seriously injured when the 1999 Ford Mustang in which he was riding collided with a utility pole and caught fire. He suffered severe burns that required amputation of both legs. The fire was caused by crush damage to the wiring and connectors of the Mustang's dashboard wiring harness. Tunnell sued Ford for breach of implied warranty, alleging that the Mustang was defective and unreasonably dangerous for foreseeable uses because it was not equipped with a battery cutoff device (BCO). He claims that a BCO would have prevented the fire by automatically cutting off power to the dashboard wiring harness upon impact.

Appendix A

Tunnell proffered the testimony of an automotive engineering expert, Jerry Wallingford, who explained how dashboard wiring harnesses present a fire hazard and how BCOs could effectively address the problem. Wallingford testified that Jaguar (a Ford company) had been using a BCO since 1988. He also presented the results of a test of a prototype BCO he had developed for the 1999 Mustang. In his test Wallingford separated from the dashboard wiring harness certain circuits he identified as critical for safety, including power windows, power door locks, and hazard lights. The test showed that, when triggered, the prototype cut off power to the dashboard wiring harness, while allowing power to flow to the critical circuits. Wallingford testified that similar BCOs were being manufactured, and used in BMWs and Jaguars, before 1999, and that any of these devices would prevent electrically generated post-collision fires. He concluded that the absence of a BCO made the Mustang unreasonably dangerous in the event of a collision, but it did not make the car defective.

The district court struck Wallingford's testimony as unhelpful and unreliable because (1) he was contradictory about whether the absence of a BCO rendered the Mustang defective; (2) he did not show that a risk-benefit analysis favored use of BCOs; (3) he confined his defectiveness opinion to collisions like Tunnell's rather than the full range of ordinary and foreseeable uses; and (4) his methods did not comply with several of the factors set forth in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993). Without the stricken evidence, the court determined that Tunnell had

not proved that consumers had a reasonable expectation of no fires in their vehicles. The court therefore granted Ford's motion for a directed verdict.

Tunnell filed a motion for a new trial, claiming that the district court erred in striking Wallingford's testimony. The district court denied the motion. Several months later, Tunnell discovered that Ford had failed to produce documents regarding a BCO manufactured by Tyco and moved again for a new trial. The court denied the motion because the evidence replicated information Tunnell already knew. Tunnell appeals.

II.

In a products liability action based on allegations of defective design, a plaintiff must prove that a defect rendered the product unreasonably dangerous for foreseeable uses. *Dreisonstok v. Volkswagenwerk, A.G.*, 489 F.2d 1066, 1073 (4th Cir. 1974). A defective product is considered unreasonably dangerous if it violates government or industry safety standards or if it does not conform to consumers' reasonable expectations. *Alevromagiros v. Hechinger Co.*, 993 F.2d 417, 420 (4th Cir. 1993). Consumer expectations may be established by evidence of actual industry practices, published literature, or direct evidence of what reasonable purchasers consider defective. *Id.* at 420-21.

No industry standards require automakers to install BCOs. Tunnell therefore sought to prove by Wallingford's testimony that consumers reasonably

expected automakers to employ BCOs to prevent post-collision electrical fires. Tunnell argues that the district court erred in striking Wallingford's testimony and that, even if the decision to strike was proper, Tunnell did not need Wallingford's testimony to avoid a directed verdict.

A.

We review the district court's decision to strike Wallingford's testimony for abuse of discretion. *Cooper v. Smith & Nephew, Inc.*, 259 F.3d 194, 200 (4th Cir. 2001).

A plaintiff may rely on expert testimony if it is relevant and reliable. Fed.R.Evid. 702. The district court determined that Wallingford's testimony did not satisfy either of these requirements. First, the court determined that his testimony was irrelevant because it did not establish that the Mustang was defective. Wallingford failed to testify unequivocally that the absence of a BCO rendered the Mustang defective for foreseeable uses. Instead, he stated that the Mustang was "unreasonably dangerous" in collisions, J.A. 3444, but that he would not "call it defective." J.A. 5371. A court may exclude testimony that does not tend to show that a suggested product change was necessary to meet existing standards or reasonable consumer expectations. *See Sexton v. Bell Helmets, Inc.*, 926 F.2d 331, 338 (4th Cir.1991). The district court thus did not abuse its discretion in striking Wallingford's testimony because he appeared to conclude that BCOs would be a desirable added safety device rather than a necessary correction for a defective product.

Appendix A

The district court's second reason for striking Wallingford's testimony was his failure to employ sound methods to demonstrate that a BCO would be a reasonable solution to the problem of post-collision electrical fires. The reliability assessment of expert testimony is guided by a flexible analysis of several factors: (1) whether a theory or technique can be (and has been) tested; (2) whether the theory or technique has been subjected to peer review and publication; (3) whether a technique has a high known or potential rate of error and whether there are standards controlling its application; and (4) whether the theory or technique enjoys general acceptance within the relevant community. *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 149-50 (1999) (citing *Daubert*, 509 U.S. at 592-94). Wallingford opined that his prototype would prevent electrical fires while avoiding some of the safety risks posed by BCOs that cut off power to all dashboard circuits. He did not, however, test the prototype (or any other available BCOs) to determine whether they would create safety problems in other scenarios or whether the choice of critical circuits, to which power would be maintained, was sufficient to ensure passenger safety. Wallingford conceded he had not analyzed whether circuits not identified as critical-including the dome light, car horn, taillights, radio, and power point-provided significant safety benefits that would be lost due to operation of the prototype. There was also no evidence that Wallingford's BCO solution had been subjected to peer review or had been generally accepted within the automotive engineering community. Absent more extensive testing by Wallingford or acceptance of the

BCO solution by his peers, the district court's decision to strike Wallingford's testimony was not an abuse of discretion.

B.

In light of its decision to strike Wallingford's testimony regarding the Mustang's defectiveness, the district court determined that Tunnell had presented insufficient evidence of a product defect and directed a verdict for Ford. We review *de novo* a district court's grant of a directed verdict "to determine whether the evidence presented at trial, viewed in the light most favorable to [the non-moving party], would have allowed a reasonable jury to render a verdict in [its] favor." *Freeman v. Case Corp.*, 118 F.3d 1011, 1014 (4th Cir. 1997).

Tunnell argues that the district court should not have directed a verdict against him because a prior discovery sanction against Ford in this case relieved Tunnell of the burden of proving a defect. The sanction took the form of an instruction that consumers "expected that there would be no fires in collision and noncollision situations where such fires could be prevented by design and construction, balancing known risk and dangers against the feasibility and practicability of applying any given technology." J.A.2086. In other words, the instruction allows the conclusion that consumers expected no fires in their vehicles if reasonable means were available to prevent them. The instruction answers one part of the defectiveness inquiry: what consumers expected. It does

not, however, establish that a consumer's expectation of no fires would always be reasonable. The instruction leaves to Tunnell the task of showing that BCOs could prevent fires in a feasible and practicable way that would not create new safety hazards outweighing their safety benefits. The district court thus did not violate the law of the case by requiring Tunnell to proffer evidence that consumers' expectations of no fires were reasonable.

C.

Tunnell alternatively argues that he proffered sufficient evidence of defectiveness independent of Wallingford's stricken testimony, and that the district court erred in requiring the evidence of reasonableness of consumer expectations to take the form of a risk-benefit analysis. Our court has stated that such balancing is needed to determine whether consumer expectations are reasonable. *See Redman v. John D. Brush & Co.*, 111 F.3d 1174, 1181 (4th Cir. 1997). Generally, a design change that avoids one danger while creating others of a similar or greater magnitude does not conform to consumers' reasonable expectations. *See id.* (unreasonable to consider a fire resistant safe defective because it was not burglar resistant where burglar resistance would decrease fire resistance). The district court correctly required some evidence that the benefits of BCOs outweighed their risks to support a conclusion that the Mustang's lack of a BCO deviated from reasonable consumer expectations. Because Tunnell's evidence did not show that the risks associated with a power cutoff were outweighed by the benefits from a

decreased possibility of post-collision electrical fires, the district court correctly granted Ford's motion for a directed verdict.

III.

Tunnell's remaining argument relates to the district court's treatment of Ford's discovery misconduct. In December 2005, after the district court had issued the directed verdict, Tunnell moved for sanctions and a new trial, claiming that Ford had failed to produce documents related to BCOs manufactured by Tyco. The district court granted the motion for sanctions and denied the motion for a new trial.

Federal Rule of Civil Procedure 60(b)(3) allows the district court to grant a new trial if a party engages in fraud, misrepresentation, or other misconduct. The moving party must (1) have a meritorious defense; (2) prove misconduct by clear and convincing evidence; and (3) show that the misconduct prevented the moving party from fully presenting his case. *Schultz v. Butcher*, 24 F.3d 626, 630 (4th Cir.1994). The court then balances the policy favoring finality of judgments against the need to do justice to the moving party to determine whether a new trial is appropriate. *Square Constr. Co. v. Wash. Metro. Area Transit Auth.*, 657 F.2d 68, 71 (4th Cir.1981). We review the court's decision for abuse of discretion. *Id.*

The district court denied Tunnell's motion for a new trial because Tunnell had not shown that Ford's

discovery misconduct prevented him from fully presenting his case. Where a party is able to fully prepare and present his case notwithstanding the adverse party's misconduct, the district court may deny relief under Rule 60(b)(3). *Karak v. Bursaw Oil Corp.*, 288 F.3d 15, 21-22 (1st Cir. 2002). Although Ford may have failed to turn over documents related to the Tyco BCO and its use in Aston Martin vehicles, Tunnell had learned much of the information contained in the undisclosed Ford documents from other sources during discovery. We agree with the district court that this independent knowledge enabled Tunnell to pursue any further development of the evidence he desired. Ford's actions thus did not prevent him from fully and fairly presenting his case and the district court did not abuse its discretion in denying Tunnell's motion for a new trial.

IV.

In sum, Tunnell's evidence failed to support a finding that automobile consumers reasonably expected no electrical fires in 1999. We therefore affirm the district court's order granting Ford a directed verdict. We also affirm the district court's denial of Tunnell's request for a new trial based on Ford's discovery misconduct because it did not prevent Tunnell from fully presenting his case. The district court's orders are therefore

AFFIRMED.

APPENDIX B — MEMORANDUM OPINION OF THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF VIRGINIA, DANVILLE DIVISION FILED SEPTEMBER 2, 2005

IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF VIRGINIA DANVILLE DIVISION

CIVIL ACTION No. 4:03 CV 00074

JUDGE NORMAN K. MOON

JOHN WITTEN TUNNELL,

Plaintiff,

v.

FORD MOTOR COMPANY,

Defendant.

MEMORANDUM OPINION

This matter is before the Court on Plaintiff's Motion for a New Trial. For the reasons that follow, the motion shall be denied.

I.

On October 25, 2004, the Magistrate Judge entered a Report and Recommendations regarding Plaintiff's

first motion for sanctions. The Magistrate Judge recommended imposing a jury instruction stating that the following fact had been established: "[w]hether in a collision or non-collision context, consumers expected that there should be "No Fires!" in passenger automobiles as of 1988."

After this proceeding, but before trial, Plaintiff filed two Motions for Default Judgment based on Ford's alleged discovery abuses. Plaintiff filed the first of these on February 25, 2005. In an April 22, 2005 opinion on this motion, the Magistrate Judge recommended denying the motion, but he also ordered that Ford produce any documents in its possession or control that referred to the operation of the inertia switch used on Jaguar motor vehicles. In response, Ford produced five pages of additional material concerning the Jaguar inertia switch. Arguing that this Ford production violated the April 22, 2005 Order, Plaintiff again moved for default judgment on May 12, 2005.

Jury trial was conducted from May 25 to June 13, 2005. At the beginning of trial, in consideration of the outstanding sanctions motions, the Court adopted in part the Magistrate Judge's October 25, 2004 Report and Recommendations. Modifying the sanction language proposed by the Magistrate Judge, the Court stated that it would impose the following jury instruction as a sanction: "Consumers by 1988 expected that there would be no fires in collision and non-collision situations where such fires could be prevented by design and construction,

balancing known risks and dangers against the feasibility and practicability of applying any given technology."

On the morning of June 13, 2005, Plaintiff filed a supplemental motion for sanctions Pursuant to Federal Rule of Civil Procedure 37(b)(2) for Ford's Failure to Comply with the Court's Order of April 22, 2005. Hours later, the Court granted Defendant's motion for a directed verdict. Subsequently, the Court entered a written Memorandum Opinion explaining its reasons for directing the verdict. Soon thereafter, Plaintiff filed the present motion for a new trial.

II.

A.

Plaintiff first argues that a new trial is justified because this Court's imposing of a risk-benefit burden upon Plaintiff was a prejudicial error of law and therefore excluding the testimony of Plaintiff's expert Jerry Wallingford on that basis was an abuse of discretion. As a threshold matter, however, it should be noted that Wallingford's testimony failed even before reaching the point of the risk-benefit issue. As the Court discussed in its Memorandum Opinion regarding the directed verdict, Wallingford's opinion never actually claimed that a defect existed. Instead, Wallingford reaffirmed his opinion from deposition that although the Mustang did not have a battery cutoff device ("BCO"), "I'm not going to call it defective," and that he was merely saying the Mustang "would have been a safer vehicle" with a BCO.

This admission effectively conceded the entire purpose of Wallingford's testimony on this topic, for it admits that his earlier statements were never meant to assert that the absence of Plaintiff's BCO actually constitutes a vehicle defect. To satisfy his burden in a product defect case, Plaintiff must do more than merely demonstrate that the proposed alternative would make the product "safer" than it currently is. *See, e.g., Sexton v. Bell Helmets,* 926 F.2d 331, 336 (4th Cir. 1991).

Plaintiff's attempt to resuscitate this inadequate testimony ultimately was unsuccessful. Plaintiff asserts that Wallingford's statements should be understood in the context of his other deposition testimony, which read in part as follows:

> Q: Okay. Are you saying that the Ford is defective, the 1999 Mustang, for not having one [a BCO]?
>
> A: I'm saying this vehicle was unreasonably dangerous relative to this event and relative to any post-collision fire that will be in—that it would be in, because it does not, did not have a battery cut-off switch.

This explanation, such as it is, does little to improve the value of Wallingford's testimony. Even assuming this language was actually meant to assert the presence of a defect (which is far from clear), his claim that a vehicle is unreasonably dangerous "relative to" a particular type of event still does not speak to the basic concept of legal

defectiveness. Defectiveness analysis considers whether a product is "unreasonably dangerous for ordinary or foreseeable use." *Alevromagiros v. Hechinger Co.*, 993 F.2d 417, 420 (4th Cir. 1993). As discussed in the Memorandum Opinion, this "foreseeable uses" standard necessarily requires experts to take a broad view of the product they analyze. Because the foreseeable uses of some products are wide-ranging, a product may require multiple-and potentially competing-design elements to protect against the various foreseeable uses of the product. Precisely because of this fact, one design element protecting against a foreseeable use can easily frustrate or even impair the value of another measure protecting against a different foreseeable use. For this reason, a product designer may argue in its defense that a proposed alternative design actually increases the risk that injury will result from a different, but equally foreseeable, use of the product. When such an argument is made, a plaintiff's expert cannot simply make a defectiveness judgment based upon only one particular type of accident. Rather, he must analyze whether the current design, taken as a whole, reasonably protects against the other injuries that could occur due to foreseeable uses. This result is a necessary consequence of the "foreseeable use" standard because any other standard would render a designer susceptible to inconsistent judgments on defectiveness. In one lawsuit, the designer could be liable for failing to include a certain protective device; in another, he could be liable for choosing to include it. Here, Ford unquestionably argued that Wallingford's proposed device would impose safety risks rendering the Mustang more dangerous. Because

Wallingford never addressed the question of whether the vehicle taken as a whole was unreasonably dangerous for ordinary or foreseeable uses, his opinion was meaningless on the issue of defectiveness.

B.

Ultimately, the preceding analysis merges with the issue Plaintiff raises in his motion regarding the risk-benefit analysis. The risk-benefit analysis is not, as Plaintiff argues, some additional technical hurdle that this Court is imposing where none existed before. Rather, it is a basic concept imbedded in any defectiveness analysis, requiring that a proposed alternative design actually cure a product of its alleged defects. Contrary to Plaintiff's contention, Virginia along with the Third Restatement of Torts does require evidence from a plaintiff that an alternative design truly provides more benefits than risks.

Although the Third Restatement does not require a plaintiff "to establish with particularity the costs and benefits associated with adoption of the suggested alternative design" in light of the "inherent limitations on access to relevant data," it nevertheless clearly does contemplate that a plaintiff will produce some affirmative evidence as to the risk-benefit analysis. As Plaintiff acknowledges, the Restatement is quite clear on this point:

> When evaluating the reasonableness of a design alternative, the overall safety of the

> product must be considered. It is not sufficient that the alternative design would have reduced or prevented the harm suffered by the plaintiff if it would have introduced into the product other dangers of equal or greater magnitude.

Restatement (Third) of Torts: Products Liability § 2 cmt. f(1997).[1] Plaintiff acknowledges that some jurisdictions have interpreted the Third Restatement to require proof than an alternative design has passed a risk-benefit analysis, but he argues that neither the Virginia Supreme Court nor the Virginia General Assembly has expressly adopted the Third Restatement. Even assuming *arguendo* that Virginia has rejected express adoption of the Third Restatement in its entirety, however, this fact alone does not suggest that principles from the Third Restatement are not integrated in Virginia common law. As with any area of law, persuasive authority in the form of case law from other jurisdictions and restatements is instructive in identifying Virginia common law rules.

It is true that in Virginia cases, the law does not always require quantitative evidence as to the risk-benefit analysis. *Ford v. Bartholomew*, 224 Va. 421, 297

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1. It may not always be contested whether a proposed alternative design aimed at reducing a particular risk would introduce into the product other dangers of equal or greater magnitude. *See infra* note 2 and accompanying text. When it is, however, analysis of the risks and benefits of the proposed device, as recognized by the Third Restatement, becomes significant.

S.E.2d 675 (1982), upheld expert testimony that a gear shift "does not conform with what I consider to be safe engineering standards," even when that expert had not offered any risk-benefit test results to verify his theory. Instead, the expert had relied upon a comparison of the gear shift to the design of one in an Oldsmobile, as well as several other points of analysis: instruction manuals and data compiled by the National Highway Traffic Safety Administration; consultation with other experts; experimentation with the transmission systems in a Lincoln, Cadillac, and Ford; observation of mechanics as they disassembled transmission components; and disassembly of one transmission personally. In light of this research, the Court concluded that his opinion was based on a proper foundation and that it was for a jury to determine what weight to accord his testimony. *Id.* at 430, 297 S.E.2d 675. Similarly, other Virginia cases have not required quantitative risk-benefit analysis when there is evidence that the proposed alternative design was used in other products. *See Lust v. Clark,* 792 F.2d 436 (4th Cir.1986) (a proposed alternative pinch point placement and guarding device were implemented by other manufacturers); *Blevins v. New Holland,* 128 F.Supp.2d 952 (W.D.Va.2001) (a plaintiff's alternative emergency stop design, while not used on agricultural equipment, was used on industrial equipment); *Chestnut v. Ford Motor Co.*, 445 F.2d 967 (4th Cir. 1971) (evidence of an alternative device more reliable than a solenoid was found sufficient to impose liability for a malfunctioning headlight closing lid).

Plaintiff argues that these Virginia cases

demonstrate that he need not provide a risk-benefit analysis here, where the proposed alternative design is already in use. This argument fails on two grounds. First, it is simply not the case that Plaintiff's proposed alternative design here was already in use. Unlike the above cases, Plaintiff is proposing the use of an inertia switch in a protective manner that had never been pursued by any other producer before. Specifically, the inertia switch would cut off not just a particular circuit, such as a fuel pump, but *all circuits* in the car except a few so-called critical circuits. Further, based on the evidence before the Court, no other vehicle in the industry has such a device. Further, Plaintiff's own proposed design did not even identify exactly which "critical" circuits would be excepted (preferring instead to impose that onus upon the defendant), so it is simply impossible to say that the proposed design is the same as one already in use. For this reason, Plaintiff cannot maintain that this case is analogous to those cited above, where the fact that a proposed design was previously in use already provided adequate evidence as to the risk-benefit analysis. Second, and equally important, the above cases are distinguished because their proposed alternative designs did not create potential new safety risks. In each of the cases Plaintiff cites, no defendant had argued that the plaintiff's proposed alternative design imposed new risks upon consumers that would have outweighed their potential safety benefits. In such circumstances, the defect analysis was simple, for it was effectively conceded that the proposed device would

provide a net safety benefit.[2] Yet when the potential drawbacks of a proposed alternative design are at issue, as here, evidence that the devices benefits truly outweigh its risks becomes critical. The cases cited in Plaintiff's brief do nothing to undermine this concept.

Accordingly, Plaintiff is incorrect in contending that Virginia does not require a risk-benefit analysis in these circumstances. Ultimately, the necessity of establishing that a proposed alternative design would satisfy the risk-benefit analysis is a matter of common sense. When a defendant argues that a proposed alternative device imposes safety risks, a plaintiff necessarily must produce some evidence that the proposed device will help more than it hurts. Without such evidence, it is impossible to determine whether the proposed alternative would truly cure a product of its alleged defect, or instead merely substitute one defect for another. One need not refer to the Third Restatement, academic commentary, or interpretive decisions to understand this basic point.

For these reasons, it was not prejudicial error for this Court to exclude Wallingford's defectiveness testimony. Ford had argued that the proposed alternative design imposed serious safety risks. For Wallingford to argue that the Mustang was defective for not

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2. *See, e.g., Lust v. Clark*, 792 F.2d 436 (4th Cir.1986), where there was no argument that a proposed alternative pinch-point design introduced its own safety risks, and *Blevins v. New Holland*, 128 F.Supp.2d 952 (W.D. Va. 2001), where there was no evidence that a proposed emergency stop design could potentially create new risks for riders.

incorporating his proposed BCO, he needed to satisfy himself that the BCO's potential risks truly were outweighed by its benefits. To be sure, evidence of the risk-benefit analysis need not always come in the form of hard or quantitative evidence.[3] But certainly it must come in some form. Because Wallingford did not provide such evidence, analyze it, or even undertake to do so, his opinion as to defectiveness was meaningless and thus properly excluded. In light of this exclusion, and Plaintiff's dearth of other evidence on the issue, the Court's directed verdict was proper.

C.

Plaintiff also requests a new trial based on the claim that this Court has not yet ruled upon "three critical discovery matters concerning Ford's continued withholding of evidence about consumer expectations of NO FIRES and NO IGNITION SOURCES in collisions, and Ford's continued withholding of evidence about the operation and characteristics of inertia switches on Jaguars." Plaintiff argues that in light of the Court's requirement that he satisfy a risk-benefit analysis, he should be granted relief under these motions as they sought enforcement of discovery requests that went to the risk-benefit issue.

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3. The Court declines today to impose any bright line standard on this issue. The nature and the quality of risk-benefit evidence needed to survive directed verdict is necessarily a fact-specific question best reserved for case-by-case consideration.

This claim also must fail. The two motions for default judgment preceded the Court's sanctions hearing of May 25, 2005, where this Court adopted in part the Magistrate Judge's proposed sanction instruction. Implicit in the Court's ruling of that date was a denial of Plaintiff's default judgment motions, which essentially were seeking further relief from the Court. For the reasons discussed in the Magistrate Judge's Report and Recommendation of April 22, 2005, default judgment is not an appropriate remedy for Ford's alleged discovery violations described in the First Motion for Default Judgment. Furthermore, the Court does not find that the other alleged discovery violations described in the Second Motion for Default Judgment (Docket No. 436) demonstrate the need for a default judgment. Although Plaintiff is adamant that Ford's claim that certain requested Jaguar documents are not available is beyond belief, this Court disagrees and is not prepared to grant sanctions on this basis. The Court's intention in granting the limited sanctions that it did on May 25, 2005 was to dispose of these two motions as well.

For this reason, the Court takes Plaintiff's subsequent June 13, 2005 Supplemental Brief in Support of Plaintiff's Motion for Sanctions (Docket No. 509) essentially as a motion for reconsideration. Again, the Court sees no reason to impose sanctions based on the argument in the brief. The "logic units" at issue in the cross-examination of Samuel McKnight are of dubious probative value for either side in the case and they ultimately have no bearing on the failures of

Appendix B

Wallingford's testimony that were the basis of this Court's directed verdict.

III.

For the foregoing reasons, Plaintiff has not satisfied the burden of establishing the need for a new trial. Plaintiff 's motion accordingly shall be denied.

An appropriate Order shall issue.

ENTERED: s/ Norman K. Moon
U.S. District Judge

September 2, 2005
Date

APPENDIX C — MEMORANDUM OPINION OF THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF VIRGINIA, DANVILLE DIVISION FILED JUNE 27, 2005

IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF VIRGINIA, DANVILLE DIVISION

CIVIL ACTION NO. 4:03 CV 00074

JUDGE NORMAN K. MOON

JOHN WITTEN TUNNELL,

Plaintiff,

v.

FORD MOTOR COMPANY,

Defendant.

MEMORANDUM OPINION

On June 11, 2005, upon the close of Plaintiff's evidence at trial, Defendant moved for a directed verdict. Because the Court agrees that Plaintiff cannot establish a necessary element of Plaintiff's cause of action, Defendant's motion shall be granted.

Appendix C

I.

On November 18, 1999, Plaintiff John Witten Tunnell was a passenger in a 1999 Ford Mustang operated by Blake Warren Athey ("Athey") on State Route 609, in Henry County, Virginia. Athey lost control of the Mustang and struck a utility pole. Plaintiff could not be removed from the Mustang after the accident because his legs were trapped in the crush damage. Several minutes after the collision, a fire started somewhere near the dash of the Mustang, which spread throughout the interior of the vehicle until Plaintiff was engulfed in fire. Plaintiff suffered extensive burns, which required above-the-knee amputations of both of his legs. He also suffered brachial plexus injuries to his upper extremities when rescue personnel attempted to pull him from the burning vehicle.

Plaintiff alleges that the 1999 Mustang was defective in design and unreasonably dangerous because the Mustang was not equipped with a battery cutoff device ("BCO") or a similar device, which would eliminate electrical ignition sources for a post-collision fire. At trial, Plaintiff presented evidence from several experts, including Charles Crim and Jerry Wallingford. At the close of Plaintiff's evidence, Defendant moved to strike the expert testimony of Plaintiff's expert Jerry Wallingford. Defendant also moved for a directed verdict, claiming the Plaintiff cannot establish essential elements of his case.

Appendix C

II.

A preliminary issue to be addressed is Defendant's Motion to Strike the Testimony of Plaintiff's Expert, Jerry Wallingford. Prior to trial, Plaintiff designated Wallingford as an expert, which Defendant opposed. At a *Daubert* hearing, the Magistrate Judge concluded that Wallingford's expert testimony should be permitted regarding certain points but not others. This Court subsequently adopted the Magistrate's recommendations as to Wallingford. Nevertheless, a court's obligation to serve as a gatekeeper for expert testimony under *Daubert* is ongoing, and if at any time a court concludes that proffered expert testimony is not proper, it must exclude it. After hearing Wallingford's testimony at trial, the Court has concluded that on at least one significant point, Wallingford's testimony did not measure up to what was promised at his *Daubert* hearing. Specifically, for the reasons discussed below, Wallingford did not demonstrate at trial that he was qualified to give expert testimony regarding the issue of defectiveness. For this reason, the Court has determined that this portion of Wallingford's testimony must be excluded.

Where expert opinion evidence is proffered in litigation, courts have an obligation to serve as gatekeepers to determine whether that expert opinion is grounded in objective underlying scientific methodology as opposed to mere speculation or conjecture. *Daubert v. Merill Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 593 (1993). In doing so, courts must

make "a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and whether that reasoning can be applied to the facts at issue." *Id.* at 592-93. Unsupported expert opinions are excluded as evidence because "nothing in the Federal Rules of Evidence requires a district court to admit opinion evidence which is connected to existing data only by the *ipse dixit* of the expert." *General Electric Co. v. Joinder,* 522 U.S. 136, 146 (1997).

In determining whether the methodology or technique underlying the formation of an expert's opinion is reliable, the court *may* consider several factors in a flexible manner depending on the particular circumstances of each case, as there are numerous types of expertise. *Kumho Tire Co. v. Carmichael,* 526 U.S. 137, 150-51 (1999). These factors include: "[1] Whether a 'theory or technique . . . can be (and has been) tested'; [2] Whether it 'has been subjected to peer review and publication'; [3] Whether, in respect to a particular technique, there is a high 'known or potential rate of error' and whether there are 'standards controlling the technique's operation'; and [4] Whether the theory or technique enjoys general acceptance within a relevant scientific community." *Id.* at 149-50 (citing *Daubert,* 509 U.S. at 592-94). The *Daubert* court emphasized that its list of factors was not definitive and that no single factor by itself was determinative. *Daubert,* 509 U.S. at 593. Instead, the Court emphasized that the analysis is a "flexible one," *id.* at 594, and that "many factors will bear on the inquiry." *Id.* at 593. As a result, courts applying

the *Daubert* standard have identified other factors that are relevant to the analysis. *See, e.g., In re Paoli R.R. Yard PCN Litig.*, 35 F.3d 717, 742 n.8 (3d Cir. 1994) (identifying additional factors to consider, such as the non-judicial uses to which the method has been put).

Wallingford's testimony at trial demonstrated that at least a portion of his expert opinion evidence must be excluded. During his testimony, Wallingford attempted to offer expert testimony on the issue of whether the Mustang contained a defect that rendered it unreasonably dangerous for ordinary use or foreseeable misuse. All of his testimony on this issue, however, fails the basic standards of *Daubert* and its progeny. His opinions on this topic contain so many inconsistencies, dubious methods, and unsupported conclusions that they are devoid of value to a fact finder.

The first flaw in Wallingford's testimony regarding defectiveness could not be more fundamental, for it strikes at the very heart of his expert opinion. Although Wallingford claimed in his direct examination that the lack of a BCO was a defect, he effectively conceded the exact opposite on cross examination. He stated that his testimony was actually only intended to indicate that the BCO would have made vehicles safer, and that ultimately, the absence of such a device actually is *not* a defect:

> Q: Yesterday, and on your direct examination, I believe that ultimately *what you were saying is that the lack of a battery cutoff switch, in your opinion, even though you*

haven't done these failures mores and effects analysis, or evaluated the risks that I was just talking about, but nevertheless, you said in your opinion that the lack of a battery cutoff is a defect in a vehicle?

A: *Yes.*

Q: Do you remember being asked the same question in deposition in this case?

A: Yes.

Q: And do you remember on March 7th, 2003, you were asked that question?

A: Just a moment. If you could tell me the page and line number.

Q: I'll refer you to page 26, to lines 10 and 11. You were asked whether cars that don't have battery cutoffs are defective? And did you say, among other things, "I'm not going to call it defective."

A: Yes, sir. Explaining previous verbiage, that's what I said on that page and that line.

Q: Let's read your whole answer.

. . .

Appendix C

Q: Question: "And like you said the last time, if the Ford's defective then for not having a BCO, they all are?" And your answer: "No, I did not. *I'm saying I'm not going to call it defective.* I'm saying this accident, the trauma that occurred to Mr. Tunnell, was because these—there was not a BCO vehicle, BCO system in that, battery cutoff system. *I'm saying it would have been a safer vehicle. My vehicle, your vehicle. Mr. Smith 's vehicle, if it was equipped with a BCO. I'm not going to stand here and say that every vehicle that doesn't have one is defective.*" That's what you said?

A: Yes, that's correct.

Q: *Have you changed that opinion*

A: *No, sir,* I think I indicated—

(Wallingford Trial Test. of 6/8/05) (emphasis added). This admission on cross examination effectively concedes the entire purpose of Wallingford's expert testimony on this topic, for it admits that his earlier statements were never meant to assert that the absence of Plaintiff's BCO actually constitutes a vehicle defect. A mere claim that a vehicle might be safer with a battery cutoff device does not address the distinct and much more serious question of whether vehicles without such devices are defective. Although a manufacturer has a duty to design a product that is reasonably safe for foreseeable use, the manufacturer is not required to design "the best possible product" *Sexton v. Bell Helmets,* 926 F.2d 331, 336 (4th

Cir. 1991) (quoting *Jones v. Hutchinson Mfg., Inc.*, 502 S.W.2d 66, 69 (Ky. 1973)). Some products, no matter how carefully manufactured, are inherently dangerous, and virtually every product is capable of causing injury. *Id.* Therefore, Wallingford's assertion that the Ford would be merely "safer" with a BCO is not germane. Because Wallingford explicitly rejected the notion that the Mustang at issue was defective, his expert testimony cannot be offered for this proposition.

Moreover, even if the Court were to assume *arguendo* that Wallingford's testimony does not admit the absence of a defect—but rather was merely inconsistent on this issue—his opinion still would not pass muster as expert testimony. First, even bracketing his inconsistencies, Wallingford's particular claim regarding the defectiveness of the Mustang is legally insufficient to establish a defect. At the end of his cross examination, Wallingford stated that although he could not say all vehicles lacking a BCO were defective, he could say that the absence of a BCO in Plaintiff's Mustang was a defect *in this particular accident.* This conclusion entirely misses the mark in a defect analysis. An automaker does not have the luxury of foreseeing the particular fate that will befall each of its vehicles, and then individually designing each vehicle specifically to guard against the risks of its future accidents. Rather, an automaker must create a vehicle design that reasonably protects against the host of accidents that could potentially occur to any of its vehicles. Thus, in determining whether a vehicle is defective, an expert cannot make a judgment based on a particular accident,

but must analyze whether the vehicle taken as a whole was unsafe for reasonable uses. Wallingford's claim regarding defectiveness is similar to arguing that a crashed vehicle would have been better served by having its engine on the roof rather than under the hood—potentially true, but useless from a design perspective. Because Wallingford's conclusion is meaningless, it is of no value on the issue of defectiveness.

Second, and equally significant, Wallingford's testimony demonstrated that he had no scientifically valid methodology for coming to his conclusions regarding defectiveness. It is a fundamental precept of all expert testimony that it must be grounded in some objective underlying scientific methodology. *Daubert*, 509 U.S. at 592-93. Here, Wallingford's testimony on the issue of a defect badly fails this test. In determining whether the absence of a device in a product renders that product unreasonably dangerous, as a matter of common sense such analysis involves two questions. The first is whether the device, if present, truly would provide some safety benefit. The second is whether the safety benefit of the device would outweigh any additional risks that the device created. Only after satisfying both of these steps can an analyst reasonably conclude that the device, *taken in the whole*, is actually desirable and that its absence in a product truly renders the product unreasonably dangerous. Although Wallingford did provide testimony as to the potential benefits of the BCO by opining that the device was feasible and would have prevented the injury at issue, he completely ignored the second step in the analysis. Indeed, Wallingford

acknowledged that the inclusion of a battery cutoff device, even when it protected certain "critical circuits" in a vehicle, potentially posed a variety of safety concerns that could result in injury and death. Specifically, he acknowledged that various circuits that he had not identified as critical—including a dome light, car horn, tail lights, radio, and power point—potentially provided significant safety benefits that would be lost due to operation of his proposed BCO. Yet when Wallingford was examined as to the potential risks that the BCO posed, he specifically stated on cross examination that he did not analyze this issue, that he did not attempt to analyze it, and that he was not qualified to analyze it. Although he offered the constant refrain that "I am not a statistician," Wallingford needed to perform some quantitative analysis before he could opine that the Mustang was defective for lacking his proposed BCO.

Furthermore, Wallingford's methods for determining that the Mustang was defective also fail many of the explicit factors regarding expert opinion established through *Daubert* and its progeny. First, Wallingford was unable to testify that his theory regarding the Mustang "has been subjected to peer review and publication," *Daubert,* 509 U.S. at 593, because he declined to expose it to the rigors of those processes. *See Mitchell v. Gencorp, Inc.*, 165 F.3d 778, 783 (10th Cir. 1999) ("By failing to subject their opinions to peer review, the experts missed the opportunity to have other scientists review their work and warn them of possible flaws in their methodology."). Similarly, Wallingford did not test the results of his alternative

design to determine a "known or potential rate of error," *Daubert,* 509 U.S. at 594. Because he did not do so, it is impossible to know how successful his alternative design would be on street-ready vehicles. Further, Wallingford's theories are also not generally accepted within the scientific community. *Id.* Finally, Wallingford is one of a class of experts who are not "proposing to testify about matters growing naturally and directly out of research they have conducted independent of the litigation, . . . [but] have developed their opinions expressly for the purposes of testifying." *Daubert v. Merill Dow Pharmaceuticals, Inc.*, 43 F.3d 1311, 1317 (9th Cir. 1995). Here, Wallingford prepared his analysis solely for his testimony in the case and has not conducted research on this topic independently. As such, the reliability of his methods and the value of his testimony are even further discounted.

For all these reasons, Wallingford lacked a sound scientific basis for his expert opinion on the issue of defectiveness. Accordingly, all of his expert testimony on this issue shall be excluded.

III.

In light of the exclusion of Wallingford's testimony regarding the issue of defectiveness, the Court now turns to the issue of the directed verdict. A motion for a directed verdict, or judgment as a matter of law, may be made after "a party has been fully heard on an issue and there is no legally sufficient evidentiary basis for a reasonable jury to find for that party on that issue."

Fed. R. Civ. P. 50(a)(1). In considering such a motion, a court must consider the evidence "in its aspect most favorable to the party against whom the motion is made, with every fair and reasonable inference which the evidence justifies." *Mandro v. Vibbert*, 170 F.2d 540, 541–42 (4th Cir. 1948) (citations omitted). *See also Smitty Baker Coal Co. v. United Mine Workers*, 457 F. Supp. 1123 (W.D. Va. 1978), *aff'd* 620 F.2d 416 (4th Cir. 1980).

At trial, Plaintiff argued that the Ford Mustang at issue was defective because it was not equipped with a BCO, which would have operated in the accident to prevent the ignition of a post-collision fire by damaged electrical components. In a breach of warranty action, a plaintiff is required to prove that: (1) the product contained a defect that rendered it unreasonably dangerous for ordinary or foreseeable use; (2) the defect existed when the goods left the defendant's hands; and (3) the defect actually caused plaintiff's injuries. *McAlpin v. Electric Furnace Co.*, 1996 U.S. Dist. LEXIS 12618 (W.D. Va. 1996) (citing *Logan v. Montgomery Ward & Co., Inc.*, 216 Va. 425, 428 (1975)). *See also Chestnut v. Ford Motor Co.*, 445 F.2d 967, 968 n.1 (4th Cir. 1971).

In light of the exclusion of Wallingford's testimony on the issue of the defectiveness and Plaintiff's dearth of other evidence on this topic, Plaintiff cannot establish the essential first element of the breach of warranty cause of action. Specifically, Plaintiff has not provided legally sufficient evidence to demonstrate that Plaintiff's proposed BCO satisfies the risk-benefit analysis; namely, that the BCO taken as a whole would have provided

safety benefits that outweighed its safety risks. Without sufficient evidence that Plaintiff's BCO satisfied this risk-benefit analysis, Plaintiff cannot establish that the absence of a BCO on the Ford Mustang at issue amounted to a defect that rendered the Mustang unreasonably dangerous. This critical defect leaves Plaintiff incapable of proving his case. Although the Court also harbors great doubts as to whether Plaintiff could establish the element of causation—namely, whether the BCO would have prevented the fire at issue in this case—Plaintiff's failure to demonstrate the first element of its cause of action is dispositive. Because reasonable minds could not differ as to this result, it is necessary for the Court to direct the verdict in favor of Defendant.

A.

Plaintiff's arguments against the directed verdict are without merit. First, Plaintiff argues that he is not required to prove the risk-benefit issue, because the Court's sanction instruction regarding consumer expectations essentially satisfies the overarching issue of defectiveness. Under Plaintiff's reasoning, the Court's instruction that "consumers expected no fires," coupled with the feasibility of satisfying these consumer expectations, already demonstrates the presence of a product defect. Plaintiff argues that a finding of consumer expectations already subsumes the issue of risk-benefit analysis, because if consumers expect "no fires," they have inherently balanced the risks and benefits of such an expectation.

In making this argument, Plaintiff fundamentally misunderstands the Court's ruling as to this issue. As a sanction, the Court found as a fact that "consumers expected no fires *where* such fires could be prevented by design and construction, balancing known risks and dangers against the feasibility and practicability of applying any given technology." (Emphasis added.) A critical word in this instruction is "where." Under the law of this case, consumers only expected "no fires" *where* it was clear that the risk-benefit analysis counseled in favor of preventing fires. The instruction does not imply that consumers performed a risk-benefit analysis and then determined that pursuant to that analysis, it was always best to have "no fires." Instead, it merely explains that consumers expected "no fires" where it could be shown that a given piece of "no fires" technology helped more than it hurt. For this reason, contrary to Plaintiff's argument, the Court has not ruled that "the 1999 Mustang was defective because it did not meet consumer expectations."

In actuality, the Court's instruction had the limited purpose of establishing that "plaintiff's evidence concerning consumer expectations will be legally sufficient to meet its burden on the issue of consumer expectations." As the parties are aware, consumer expectations play a significant role in the case because they, together with industry standards and government standards, can help determine whether a product defect exists. *See Alevaromangiros v. Hechinger Co.*, 993 F.2d 417, 420 (4th Cir. 1993). Because there is no relevant evidence on industry or government standards in this

case, consumer expectations evidence becomes particularly significant. Courts have explained that these expectations may be established through "evidence of actual industry practices, knowledge at the time of other injuries, knowledge of dangers, published literature, and from direct evidence of what reasonable purchasers considered defective." *Sexton v. Bell Helmets, Inc.*, 926 F.2d 331, 337 & 337 n.6 (4th Cir. 1991). Here, because the Court had already excluded from evidence a survey on consumer expectations and there was little useful evidence regarding industry practices, knowledge of injuries or dangers, or published literature, Plaintiff was at risk of lacking any evidence whatsoever on the significant issue of consumer expectations. The sanction instruction, therefore, did the significant work of establishing that at least *some* evidence existed on the issue of consumer expectations, which here was a critical component in demonstrating the presence of a defect. The sanction instruction did not, however, go so far as to demonstrate the presence of a product defect. Proving this element requires not only evidence that consumers expected "no fires" whenever such prevention would be reasonable, but also that the method of preventing the fire was in fact reasonable. As discussed above, analysis of this secondary point requires a further inquiry into the fire-prevention technology available and its particular risks and benefits. Without determining whether such technology helps more than it hurts, it is impossible to determine whether, in light of consumer expectations, it would be appropriate to include that technology in the Mustang at issue. It similarly would be impossible to determine whether the technology's

absence constitutes a defect. Thus, the Court's instruction regarding consumer expectations in no way establishes that the Mustang at issue is defective.

Plaintiff's argument also fundamentally mischaracterizes the very question of what constitutes a product defect. The Mustang at issue is not "defective" merely because there are risks associated with its electrical system and that those risks might be minimized by the inclusion of a BCO. Indeed, "proof that a technology existed, which if implemented could feasibly have avoided a dangerous condition, does not alone establish a defect." *Sexton*, 926 F.2d at 336 (quoting *Jones v. Hutchinson Mfg., Inc.*, 502 S.W.2d 66, 70-71 (Ky. 1973)). Rather, the "defect" question asks whether the absence of Plaintiff's proposed BCO in the Mustang renders the car unreasonably dangerous for foreseeable use. If Plaintiff cannot reach a point of demonstrating that the Mustang, taken as a whole, is likely better off with the BCO than without it, then Plaintiff cannot satisfy his burden. Plaintiff's case, however, merely argues that the Mustang is defective because it contained a hazard of post collision fires and that a BCO would have greatly reduced the risk. Although Plaintiff has marshaled a variety of evidence on this point, none of it manages to address the essential risk-benefit issue. Even assuming that the BCO would reduce post-collision fires, the mere fact that such injuries would be reduced does not necessarily mean that the device is desirable. Rather, it is also necessary to determine if the BCO's benefit of reducing vehicle fires outweighs its risk of harm from

cutting off various (potentially helpful) electrical circuits operating in the car.

Second, Plaintiff argues that even if it is required to demonstrate the presence of a defect by proving that its BCO satisfied a risk-benefit analysis, it has offered several pieces of evidence on this issue. Plaintiff points to: (1) a memo from Ford expert Kowalski downplaying the risk of increased injuries due to the BCO cutting power after accidents because blown fuses often cut off power after an accident regardless of the presence of a BCO; (2) the project by Ford experts Kowalski and Martell, discussing the "Safety & Security Solenoid" ("S3") automatic disconnect device that did not specifically identify any risk associated with the device; and (3) Ford's response to the National Highway Traffic Safety Administration's ("NHTSA") 1995 Advance Notice of Proposed Rulemaking ("ANPRM") on electrical system countermeasures, in which Ford did not mention that the risks of the device exceeded its benefits. None of this evidence, however, actually demonstrates that the proposed BCO here satisfies the risk-benefit analysis. The Kowalski memo is not on point because despite its downplaying of the risks, it does not actually undertake to analyze or quantify the risk-benefit calculus for a BCO. Ultimately, the mere fact that blown fuses might already cut off power in *some* collision scenarios by no means necessarily recommends a policy of cutting off power in *all* collision scenarios. Similarly, the mere fact that Kowalski and Martell's project did not explicitly identify any risks of the S3 automatic disconnect device does nothing to prove that their project

actually undertook to identify those risks, much less prove that the BCO at issue ultimately satisfies the risk-benefit calculus. Finally, Ford's response to the 1995 ANPRM is not useful because Ford was not required to engage in a costly and complex risk-benefit analysis of hypothetical BCO models before offering NHTSA a preliminary comment on a nascent safety regulation proposal. Indeed, all of Plaintiff's evidence suggests that no one has undertaken the essential project of quantifying the risks that Plaintiff's BCO would create and compare them to its benefits.

For these reasons, Plaintiff has not provided sufficient evidence to demonstrate that his proposed safety technology satisfies the risk-benefit analysis. Without such evidence, Plaintiff cannot demonstrate that the BCO would have played a valuable safety role on Ford Mustangs. And in light of this fact, Plaintiff cannot demonstrate that the absence of the technology could possibly render the Ford Mustang at issue defective. Having failed to satisfy this first element of its cause of action, Plaintiff's case must fail.

B.

Although the basis of the Court's ruling today is Plaintiff's failure to prove the presence of a product defect, it should be noted that Plaintiff's case also contains serious and potentially fatal flaws regarding the issue of causation. In order to prove the element of causation, Plaintiff needs to demonstrate not only that the fire was of electrical origin, but also that the fire

would in fact have been prevented if Plaintiff's proposed technology had been in place. Plaintiff's proposed BCO protected certain so-called "critical circuits" providing post-collision safety benefits, such as hazards and door locks, allowing them to keep running even after a collision. Both of Plaintiff's experts on causation, Wallingford and Charles Crim, indicated that they could not identify the particular circuits in the wiring harness that started the fire. Because of this fact, neither can possibly state with a reasonable degree of scientific certainty that the circuits that caused the alleged high-resistance fault were not in fact "critical circuits" that the BCO would have allowed to continue running after the accident. Because of this fact, Plaintiff cannot offer anything more than speculation as to whether the BCO actually would have prevented the fire at issue.

In response, Plaintiff argues that the proposed BCO design would have removed the critical circuits from the wiring harness itself, thereby isolating them from the greater fire risk that the wiring harness created. Yet this argument is not responsive to the basic issue of causation, namely, whether the critical circuits would have caused the fire even if the Mustang had contained a BCO. Even if the critical circuits are removed from the wiring harness, they still would have to remain somewhere in the vehicle, and Plaintiff's proposal of wrapping these circuits in protective metal sheathing in no way demonstrated that they would in fact be safer than in the wiring harness. In fact, as Ford pointed out on cross examination, the proposed metal sheathing could easily make contact with the circuit itself in a crash

scenario, and it had even more conductivity than the copper used in circuits in the wiring harness. Moreover, Plaintiff also has argued that an ultimate determination of what circuits were "critical" would be up to the Ford engineers. For this reason, Plaintiff's current proposed alterative design, which has already designated the critical circuits, cannot possibly demonstrate whether it would be feasible and effective to use protective sheathing on other potentially critical circuits, given their position and functionality within the vehicle. In this sense, it is by no means clear that even with the BCO installed on the Mustang, some critical circuit could not have caused the fire in Plaintiff's accident. For this reason, Plaintiff's inability to identify which circuits caused the alleged high-resistence fault responsible for Plaintiff's fire is likely a fatal flaw. Nevertheless, the Court declines to reach this issue in light of its previous ruling regarding Plaintiff's failure to demonstrate the element of defectiveness.

IV.

In conclusion, because Plaintiff's expert Jerry Wallingford lacked an objective scientific basis for his expert opinion on the issue of defectiveness, Ford's motion to strike his testimony shall be granted in part. In light of Wallingford's excluded testimony and Plaintiff's lack of other evidence on this point, Plaintiff cannot demonstrate the essential element of defectiveness. Accordingly, Defendant's motion for a directed verdict shall be granted, and this matter shall be stricken from the docket.

Appendix C

A written Order shall issue this day.

ENTERED: s/ Norman K. Moon
U.S. District Judge

6/27/2005
Date

APPENDIX D — EXCERPTS FROM TRANSCRIPT OF TRIAL PROCEEDINGS DATED JUNE 13, 2005

UNITED STATES DISTRICT COURT WESTERN DISTRICT OF VIRGINIA, DANVILLE DIVISION

No. 4:03CV00074
Danville, Virginia
June 13, 2005

JOHN W. TUNNELL,

Plaintiff,

vs.

FORD MOTOR COMPANY,

Defendant.

TRANSCRIPT OF TRIAL PROCEEDINGS BEFORE THE HONORABLE NORMAN K. MOON UNITED STATES DISTRICT JUDGE, and a jury.

[Commencing at page 154]

* * *

I have always made it a practice — and it has been at least my theory — that once a case gets started, that I'm not going to stop the case unless I'm certain, if there were a verdict in favor of the plaintiff, I would set it aside. And I have reached the point in this case, not considering

Mr. Neuhalfen's testimony, that if there were a verdict for the plaintiff in this case, I would be compelled to set it aside.

And, therefore — because there's no legally sufficient evidentiary basis for a reasonable jury to find that the vehicle was unreasonably dangerous, and for other defects, but that's essential it — Mr. Wallingford's opinion did not meet the legally sufficient standard — therefore, the Court grants the defendant's motion for a judgment as a matter of law.

* * * *

APPENDIX E — EXCERPTS FROM TRANSCRIPT OF TRIAL PROCEEDINGS DATED MAY 27, 2005

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF VIRGINIA,
DANVILLE DIVISION

No. 4:03-cv-00074
Danville, Virginia
May 27, 2005

JOHN W. TUNNELL,

Plaintiff,

vs.

FORD MOTOR COMPANY,

Defendant.

TRANSCRIPT OF TRIAL PROCEEDINGS
BEFORE THE HONORABLE NORMAN K. MOON
UNITED STATES DISTRICT JUDGE, and a jury.

[Commencing at page 8]

* * *

I have been still working on that language about the sanction. And I'm not going to instruct the jury, like this morning, on this. But this is what Im coming up with now: Consumers by 1988 expected that there would be no fires in collision and noncollision situations where such fires could be prevented by design and construction,

balancing known risks and dangers against the feasibility and practicability of applying any given technology.

Now, that's not some — I don't think the jury would handle that very well, but — we'll have to come up [9] with a better way — we'll have to come up with a clearer way of maybe expressing that to the jury.

But, basically, what the Court is trying to do is to say as a matter of law plaintiff's evidence about no fires will be — plaintiff's evidence concerning consumer expectations will be legally sufficient to meet its burden on the issue of consumer expectations. And it is still up to the jury to determine whether these expectations are reasonable, whether they were feasible or practicable to be applied in this case.

I hope I — I'm not too unclear.

MR. CEREGHINI: That is understood. That was a little fast for me to write down, but we'll get it from the court reporter.

THE COURT: I'll read it again, if you would like. It is pretty short.

Consumers by 1988 expected that there would be no fires in collision and noncollision situations where such fires could be prevented by design and construction, balancing known risk and dangers against the feasibility and practicability of applying any given technology.

Appendix E

Now, I'm not sure that last phrase is something the jurors — I mean, consumers will expect. But what I'm saying is the consumers had the expectation there would be no fires in collision and noncollision situations. But the [10] — whether they were reasonable expectations or not is a matter for the jury to determine. And in so doing, they — you would — you would be balancing known risks and dangers against the feasibility and practicability of applying the technology.

I don't think you could say that consumers were thinking it, other than that they wanted no fires. That's basically what they wanted. But there are all of these limitations that would affect the outcome of the case.

All right. So I'm just saying — I'm just — be careful how you talk to the jury. I mean, don't — I mean, it is still not in stone. But I hope you got the gist.

What I'm trying to do is adopt Judge Urbanski's report and recommendation, but to express it — come to some way of expressing it to the jury that is meaningful and leaves to the jury whether the expectations were reasonable and whether — under the circumstances of the case.

* * * *

APPENDIX F — ORDER OF THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF VIRGINIA, DANVILLE DIVISION DATED AND FILED AUGUST 25, 2004

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF VIRGINIA
DANVILLE DIVISION

CIVIL ACTION NO. 4:03CV00074

JOHN WITTEN TUNNELL,

Plaintiff,

v.

FORD MOTOR COMPANY,

Defendant.

ORDER

JUDGE NORMAN K. MOON

Pursuant to the authority in 28 U.S.C. § 636(b)(1)(B), this matter was referred to The Honorable Michael F. Urbanski, United States Magistrate Judge, for proposed findings of fact, conclusions and recommendations in connection with defendant Ford Motor Company's ("Defendant") Motion for Summary Judgment, filed May 7, 2004.

The Report and Recommendations was entered on June 21, 2004 (the "June 21, 2004 Report"). Defendant filed objections on July 6, 2004. Plaintiff John Witten

Appendix F

Tunnell ("Plaintiff") filed a response on July 15, 2004. A hearing was held in connection with this matter on July 28, 2004.

Notwithstanding the Court's August 4, 2004 Order declining to accept the June 28, 2004 Report and Recommendation concerning Plaintiff's survey experts Adams and Kiecker, the Court believes that the testimony of Plaintiff's engineering expert, Jerry Wallingford, creates an issue of material fact as to whether reasonable consumers would have expected the vehicle at issue — a 1999 Ford Mustang GT — to be equipped with a battery disconnect device. The Court therefore ADOPTS the June 21, 2004 Report with the exception of all references to Plaintiff's survey experts Adams and Kiecker and the consumer survey conducted in connection with this matter.

It is so ORDERED.

The Clerk of the Court hereby is directed to send a certified copy of this Order to all Counsel of Record and to Magistrate Judge Urbanski.

ENTERED: s/ Norman K. Moon
U.S. District Judge

August 25, 2004
Date

APPENDIX G — ORDER OF THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF VIRGINIA, DANVILLE DIVISION DATED AND FILED AUGUST 4, 2004

UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF VIRGINIA,
DANVILLE DIVISION

CIVIL ACTION NO. 4:03CV00074

JOHN WITTEN TUNNELL,

Plaintiff,

v.

FORD MOTOR COMPANY,

Defendant.

ORDER

JUDGE NORMAN K. MOON

Pursuant to the authority in 28 U.S.C. § 636(b)(1), this matter was referred to The Honorable Michael F. Urbanski, United States Magistrate Judge, for proposed findings of fact, conclusions and recommendations for the disposition of: (i) certain motions filed by defendant Ford Motor Company ("Defendant") to exclude the testimony of plaintiff John Witten Tunnell's ("Plaintiff") expert witnesses Charles Crim ("Crim"), J. Samuel McKnight ("McKnight"), Dr. Marjorie E. Adams ("Adams"), Dr. Pamela Kiecker ("Kiecker") and Jerry Wallingford ("Wallingford") and (ii) Defendant's Motion for Summary Judgment.

Appendix G

The Report and Recommendations issued in connection with Defendant's motions to exclude the testimony of certain expert witnesses was entered on June 28, 2004 (the "June 28, 2004 Report"). For the reasons stated in the attached Memorandum Opinion, the Court DECLINES TO ADOPT the June 28, 2004 Report in its entirety. *See* 28 U.S.C. § 636(b)(1)(A); Fed. R. Civ. P. 72(a). Specifically, the Court DECLINES TO ADOPT the portion of the June 28, 2004 Report that addresses the testimony to be provided by Adams and Kiecker. The portion of the June 28, 2004 Report that addresses the testimony to be provided by Crim, McKnight and Wallingford is ADOPTED.

The Report and Recommendation issued in connection with Defendant's Motion for Summary Judgment was entered on June 21, 2004 (the "June 21, 2004 Report"). The June 21, 2004 Report remains under consideration at this time. The Court will complete its review and issue an appropriate Order at a date in the future.

It is so ORDERED.

The Clerk of the Court is directed to send a certified copy of this Order to all Counsel of Record and to Magistrate Judge Urbanski.

ENTERED: s/ Norman K. Moon
U.S. District Judge

August 4, 2004
Date

APPENDIX H — REPORT AND RECOMMENDATION OF THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF VIRGINIA, DANVILLE DIVISION DATED AND FILED JUNE 28, 2004

UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF VIRGINIA
Danville Division

Civil Action No. 4:03CV74

JOHN WITTEN TUNNELL,

Plaintiff

FORD MOTOR COMPANY,

Defendant

REPORT AND RECOMMENDATION

This matter is before the court for report and recommendation pursuant to 28 U.S.C. § 636(b)(1)(B) concerning defendant Ford Motor Company's motions to exclude the testimony of plaintiff Tunnell's expert witnesses Charles Crim, Samuel McKnight, Marjorie Adams, Pamela Kiecker and Jerry Wallingford. These issues have been exhaustively briefed and argument was conducted on June 10, 2004.

Appendix II

OVERVIEW

It is recommended that the motions to exclude fire origin experts Charles Crim and Samuel McKnight be overruled as these experts fully meet the requirements for expert testimony under Fed. R. Evid. 702 and the standard established in *Daubert v. Merrill Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993). Further, it is recommended that the motions to exclude survey experts Pamela Kiecker and Marjorie Adams be overruled as they fully meet the requirements for survey expert testimony under Fed. R. Evid. 702, and the case law teaches that the objections raised by Ford concerning their surveys go to the weight to be attributed to this evidence and not its admissibility. Ultimately, the question of consumer expectations as regards battery disconnect devices is for the jury to decide, and the Adams and Kiecker surveys may assist the trier of fact to determine this issue. Finally, Ford's objections to certain opinions of expert witness Jerry Wallingford are granted in part and overruled in part. Based on his knowledge, experience, education, examination of the vehicle, review and study of the literature and industry practices regarding battery disconnect devices and his development and construction of an exemplar device from existing materials, Wallingford may render opinions I, II, VIII and IX as set forth in his report. While Wallingford certainly may rely upon published literature, Ford and industry documents and other evidence to establish whether a battery disconnect device was practical, feasible and cost effective, he should not be permitted to opine as to

essentially factual matters extant in other sources of proof which are reflected in opinions III through VII of his expert report. Thus, while Wallingford may testify that battery disconnect devices such as the one he installed as an exemplar on a 1999 Mustang GT were practical, feasible and would have eliminated a known hazard in 1999; he may not express, in the form of opinion testimony, essentially factual matters such as the state of Ford's knowledge in 1999 or its response to the hazard posed by post-collision electrical fires. Such facts may be established by other means and cannot be presented in the guise of expert opinions as such evidence does not fall within the strictures of Fed. R. Evid. 702. Finally, Wallingford may not offer opinion testimony concerning other similar incidents based on federal motor vehicle fatality statistics as that data does not support Wallingford's conclusion.

STATEMENT OF FACTS

On November 18, 1999, Plaintiff Tunnell was in the front passenger seat of a 1999 Ford Mustang GT which collided with a utility pole in Henry County, Virginia. Tunnell suffered a broken leg and was pinned in the vehicle by the resulting damage from the collision. Minutes after the collision, but before Tunnell could be freed from the wreckage, a fire ignited in the passenger compartment. Some eyewitnesses at the scene believed the fire to be electrical in origin because of the odor of the fire, and because they saw blue "sparking" in the dashboard. Specifically, one eyewitness, Sally Jinright, testified that she "noticed a flickering like in the center

of the dash in the console area and I started smelling what smelled like electrical wires burning and everything." Jinright Dep. at 7. When asked how tall the flame was, Jinright testified that "[i]t was just a flicker like behind the console, behind the dash. I couldn't tell. . . . It was kind of like a bluish flickering." Another eyewitness, Cynthia Weaver, testified that she saw a "spark" "right in through one of those vents" located to the right of the passenger seat. Weaver Dep. at 29-30. Weaver described the "spark" as being "like a light, a butane lighter. Like when you first strike a butane lighter, it's blue and then the blue spark just kind of ran up a little bit and then it kind of beared off and then it started turning bright yellow like orange." Weaver Dep. at 30-31. Tunnell, pinned inside the car for roughly forty-five minutes, was severely burned as fire engulfed the car's interior.

Tunnell brings this product liability action against Ford for breach of implied warranty and defective design as a result of his burn injuries. Tunnell claims that the 1999 Mustang GT was defective in design and unreasonably dangerous because it did not have a safety device to disconnect the battery after the collision, which he contends would have prevented the fire from starting. By means of expert testimony, Tunnell will seek to prove that the fire started in the dashboard because the wiring harness was crushed on impact. As there was no battery disconnect device or other means to shield the wires from crush damage, the still energized wires were crushed in the impact, causing an electrical event known as a high resistance fault. Tunnell's experts claim, based on their

examination of the vehicle employing national fire origin investigation methodology, that the fire was caused by a high resistance fault. A characteristic of such a fault is that it could have started a fire without blowing a fuse.

Although there are no government or industry standards requiring automobile manufacturers to equip vehicles with such devices, the auto industry has been aware of the hazard associated with post-collision fires for years. Tunnell expects to introduce evidence that Ford's internal studies of this issue dating back to 1975 state that installation of such devices would have eliminated post-collision fires by eight-five (85%) percent. In 1978, Ford estimated the cost of available battery-disconnect switches to be $2.50 (in 1973 dollars). Further, the National Highway Transportation Safety Administration asked the industry to comment on the efficacy of such devices in 1975 and 1995. Thus, the hazard was well known. In fact, Ford uses an inertia disconnect switch to shut off power to the fuel pump in the case of impact. Therefore, Tunnell contends that such an inertia disconnect device should have been attached to the battery as well. Nevertheless, it is undisputed that no Ford or other vehicle sold in 1999, or since, had such an inertia battery disconnect device.

Tunnell's expert engineer, Jerry Wallingford, has installed such a device on a 1999 Mustang GT, and opines that this device, coupled with other commonly available materials, would have prevented Tunnell's burn injuries. At least one of Ford's deposed witnesses, Victor DeClercq, appears to agree. DeClercq testified that Ford

considered a battery disconnect device as a means to prevent vehicle fires, and admitted, albeit tentatively, that "at least it's a possibility, that an electrical cutoff may have assisted or may have helped in this case. And that's not even completely certain in my mind yet." DeClercq Dep. (7/29/02) at 47.

Tunnell seeks to establish a breach of implied warranty by proving that Ford failed to meet reasonable consumer expectations regarding such a battery disconnect device. As evidence of reasonable consumer expectations, Tunnell offers circumstantial evidence regarding the industry's awareness of the hazard and the feasibility of a safety measure, as well as direct evidence in the form of retrospective consumer expectations surveys.

APPLICABLE LAW

1. Federal Rules of Evidence 702 and 703, and Daubert Standard

The court is obligated to serve as gatekeeper where expert opinion evidence is proffered to determine whether expert opinion is grounded in objective underlying scientific methodology as opposed to mere speculation or conjecture. *Daubert*, 509 U.S. at 589-590, 595 ("focus, of course, must be solely on principles and methodology, not on the conclusions they generate"). *See also Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 141-142 (1991). The court's obligation is codified in the Federal Rules of Evidence 702 and 703. The applicable

rule governing admissibility of testimony by experts is Federal Rule of Evidence 702, which provides:

> If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

Fed. R. Evid. 702. *See also* Advisory Committee Notes to Rule 702, 2000 Amendments ("A review of the case law after *Daubert* shows that the rejection of expert testimony is the exception rather than the rule.") The applicable rule governing the legitimacy of underlying bases of opinion testimony by experts is Federal Rule of Evidence 703, which provides in part:

> The facts or data in the particular case upon which an expert bases an opinion or inference may be those perceived by or made known to the expert at or before the hearing. If of a type reasonably relied upon by experts in the particular field in forming opinions or inferences upon the subject, the facts or data need not be admissible in evidence in order for the opinion or inference to be admitted.

Fed. R. Evid. 703. In other words, expert testimony that can assist the trier of fact is to be admitted at trial where a preliminary assessment finds "the reasoning or methodology underlying the [proffered] testimony is scientifically valid and . . . that reasoning or methodology properly can be applied to the fact at issue." *Daubert*, 509 U.S. at 592-593 (internal footnote omitted). *See also* Fed. R. Evid. 703 at Advisory Committee Notes, 1972 Proposed Rules ("The rule . . . offers a more satisfactory basis for ruling upon the admissibility of public opinion poll evidence. Attention is directed to the validity of the techniques employed rather than to relatively fruitless inquiries whether hearsay is involved.").

In determining the reliability of the methodology or technique underlying the formation of an expert's opinion (as opposed to the results, conclusion, or opinion of a scientific endeavor of an expert), the court *may* consider several factors in a flexible manner depending on the particular circumstances of each case, as there are numerous types of expertise. *Kumho Tire*, 526 U.S. at 150-151. "These factors include: [1] Whether a 'theory or technique ... can be (and has been) tested'; [2] Whether it 'has been subjected to peer review and publication'; [3] Whether, in respect to a particular technique, there is a high 'known or potential rate of error' and [4] Whether there are 'standards controlling the technique's operation'; and [5] Whether the theory or technique enjoys 'general acceptance' within a 'relevant scientific community.'" *Id.* at 150, *citing Daubert*, 509 U.S. at 592-594. However, these factors remain uncodified and by no means constitute a

"definitive checklist or test." *Id.*, *citing Daubert*, 509 U.S. at 593. As such, the court remains mindful that, in carrying out its gatekeeper function through preliminary assessment of the reliability of an underlying methodology serving as the basis of an expert's opinion, it must also root out overly pessimistic or automatic challenges that would otherwise cloud the capabilities of the jury and advocacy system. *Daubert*, 509 U.S. at 596. Therefore, "[v]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence." *Id.*; *cf. Kumho Tire*, 526 U.S. 137 (affirming expert testimony as inadmissible where expert employed purely subjective conjecture as basis for opinion and where no evidence existed that any other tire expert accepted proffered subjective methodology); and *Oglesby v. General Motors Corp.*, 190 F.3d 244 (4th Cir. 1999) (holding expert's opinion inadmissible where based on pure speculation as opposed to accepted methodologies of testing or researching broken pipe).

* * *

C. Jerry Wallingford, Mechanical Engineer, may render some, but not all, of the opinions he proffers.

Ford moved as well to exclude all of the opinions of Tunnell's expert Jerry Wallingford. Based on his education, training and experience, Wallingford is qualified to render some opinions and may testify as

follows: (1) Cause and origin of the fire in the 1999 Mustang GT; (2) Feasibility and availability of battery disconnect devices prior to 1999; (3) The design and installation of battery disconnect devices in an exemplar 1999 Mustang GT; (4) The 1999 Mustang GT lacking battery disconnect devices was unreasonably dangerous; and (5) The absence of battery disconnect devices was the proximate cause of the fire.

As regards cause and origin of the fire, Ford's motion as to Wallingford parrots the motions as regards Crim and McKnight. In that regard, Ford claims that Wallingford is neither qualified, nor did sufficient testing or appropriate investigation to form an opinion regarding the origin of the fire. As with Crim and McKnight, Ford is wrong. Wallingford is a Professional Engineer with over 40 years of experience and a member of the Society of Automotive Engineers. He has had training on NFPA 921 and has performed fire cause and origin investigations. Like Crim and McKnight, he applied the well established NFPA 921 methodology and aptly applied it to the facts of this case. Although his testimony may well be cumulative, Wallingford has sufficient experience and qualifications to testify as to the origin of the fire.

In addition, Ford claims that Wallingford cannot render opinions (2) through (5) noted above, but again misses the mark. By virtue of his education, training and experience, Wallingford is qualified to render mechanical engineering opinions regarding the design and installation of battery disconnect devices in an exemplar

1999 Mustang GT. Further, based on his study of existing literature, depositions and other evidence, Wallingford may testify as to the feasibility and availability of such devices in 1999. As noted below, while it is not an appropriate subject for expert testimony for Wallingford to opine as to the state of Ford's knowledge or its intention or motivation in taking or not taking certain steps, Wallingford certainly can base his feasibility/availability and unreasonably dangerous opinions on the state of Ford's and the industry's knowledge, investigation, study and testing of battery disconnect devices in accordance with Fed. R. Evid. 703. Not only has Wallingford studied National Highway Traffic and Safety Administration ("NHTSA"), Ford and industry literature regarding availability and testing of battery disconnect devices dating back to the 1970s, he installed a battery disconnect system in an exemplar 1999 Mustang GT using the same switch Ford uses to disconnect the fuel pump in the case of impact and other commercially available components. Wallingford also subjected his design to certain limited testing. While Ford questions the adequacy of Wallingford's testing, that issue is the subject of cross-examination and argument at trial. Similarly, pursuant to Rule 703, Wallingford also may opine as to whether the 1999 Mustang GT was unreasonably dangerous when it left Ford's hands based on his qualifications, investigation and study of industry, government and Ford literature regarding post-collision fires and battery disconnect devices. Wallinger also may opine as to whether the passenger compartment fire would have occurred had his battery disconnect system been installed. In sum,

therefore, Wallingford may offer opinions I, II, VIII and IX as these opinions clearly meet the *Daubert* and *Kumho Tire* tests for reliability.

On the other hand, there are several opinions which Wallingford proposes to offer which are not, in and of themselves, an appropriate subject of expert engineering opinion. As noted previously, while Wallingford may testify as to his opinion as to feasibility and availability of battery disconnect systems, he may not state, as expert opinions, the state of Ford's knowledge or motivation regarding battery disconnect systems. Thus, Wallingford may not testify in the form of an expert opinion that Ford has known of the danger of crash damaged wires and the availability of battery disconnect systems to eliminate the hazard. Nor may he offer expert opinions as to Ford's engineering choices or motivation. Such evidence may well be admissible through other direct and circumstantial means, but Wallingford has no qualifications, nor is there any appropriate scientific methodology to test or measure the reliability of his opinions as to what Ford knew, did or did not do, or its motivation. As those opinions are set forth in his December 12, 2003 expert report, Wallingford may not express expert opinions III, IV, V, VI, and VII. He may, of course, rely on documents and other evidence as to Ford's knowledge and actions in connection with, and as bases for those opinions he may render, particularly as regards his feasibility/availability and unreasonably dangerous opinions.

Appendix H

Finally, Ford challenges Wallingford's opinion regarding certain "other similar incidents." Wallingford examined certain data collected by the NHTSA Fatal Accident Reporting Service ("FARS") and applied certain criteria to this data concluding that there were 26 other similar incidents like the accident involving Tunnell. Based on Wallingford's analysis of the FARS data, plaintiff seeks to argue that Ford knew or should have known that damaged wiring was the probable ignition source for post-collision fires in 26 single car, frontal impact fatal collisions of Ford cars between 1985 and 1999. Tunnell provided the FARS reports and other information on these prior accidents to the court, and after careful and tedious review of this information, the court finds that there is no reasonable basis for Wallingford's opinion. Therefore, it is recommended that Wallingford's opinion based on the FARS data as to other similar incidents be excluded as unreliable and not appropriately grounded in the facts of this case. To be sure, Wallingford's analysis of the FARS data culls single car accidents in which there was a fatal fire. But that is all one can tell from the FARS data. There is no way to glean from the FARS data alone any information as to the cause or source of the fire. Criteria 22 employed by Wallingford in this FARS analysis states that "[i]f an investigation reported a cause other than electrical, electrical was considered ruled out." Pl's Opp'n Ford's Daubert Mot. Exclude Test Wallingford at 29. The problem with such an analysis is that eighty percent (80%) of the FARS files selected by Wallingford say nothing whatsoever about the source of the fire. Thus, all anyone knows of these incidents is that a single car

accident happened by striking an object in the front of the vehicle; someone was killed; and there was a fire in the vehicle. There is no way from the FARS data to know where or how the fire started; thus, there is no way to determine whether these fire related deaths were similar or not. In short, Wallingford's methodology is little more than a wet finger in the wind which does not bear up under careful scrutiny. Indeed, close review of the few files selected by Wallingford as being "similar" which contain detailed information describing the accident indicates that those accidents were not similar at all. *See* FARS # 33 (lawsuit alleges fuel system as defective); FARS # 159 (lawsuit alleges defect in dual fuel tank selector valve on Ford F-150 causing fuel spillage and vehicular fire and explosion); FARS #274 (lawsuit claims no fuel pump electrical disconnect device); FARS #360 and 454 (accident photos show fire in engine compartment of vehicle); FARS #301 (accident report recites "vehicle was fully engulfed in fire (with thick black smoke)"). Even applying the lesser standard suggested by Tunnell for introduction of evidence of other similar incidents merely for the purpose of showing notice, *Smith v. Ingersoll-Rand Co.*, 214 F.3d 1235, 1246-47 (10th Cir. 2000), Wallingford's other similar incidents analysis fails.

In *Blevins v. New Holland*, 128 F. Supp. 2d 952 (W.D. Va. 2001), Judge Jones likewise concluded that other similar accident evidence be excluded, reasoning as follows:

> Evidence of similar accidents is not generally admissible for the purpose of proving negligence or causation. *See Roll 'R' Way Rinks, Inc. v.*

Smith, 218 Va. 321, 237 S.E.2d 157, 160 (Va. 277). Such evidence may be admissible, however, to show notice or actual knowledge by the defendant of a defect in its product. *See Gen. Motors Corp. v. Lupica*, 237 Va. 516, 379, S.E.2d 311, 314 (Va. 1989).

While the prior accident involving Roger Hornsby may be relevant to show that New Holland was aware of the fact that operators of towed hay balers may leave their positions in spite of the risk of inquiry, I find that a balancing of interests dictates that such evidence be excluded pursuant to Federal Rules of Evidence 403. It is true that the similarity required is somewhat relaxed when offering prior accidents to prove notice of a dangerous condition rather than negligence, *see Benedi v. McNeil-P.P.C., Inc.*, 66 F.3d 1378, 1386 (4th Cir. 1995), but the court nevertheless maintains "broad discretion" to exclude evidence of prior incidents under rule 403. *See Brooks v. Chrysler Corp.*, 252 U.S. App. D.C. 29, 786 F.2d 1191, 1195 (D.C. Cir. 1986).

Proof of prior accidents is not easily admitted into evidence because it often results in unfair prejudice, consumption of time, and distraction of the jury to collateral matters. *See* 786 F.2d at 1198.

Blevins, 128 F. Supp. 2d at 960-961. Moreover, there is other evidence in the record that both Ford and the

industry were well aware of the hazard of post-collision fires caused by electrical system component failure and malfunction. *See, e.g.*, National Highway Traffic Safety Administration, Motor Vehicle Safety Standards, Advance Notice of Proposed Rulemaking on Electrical System Integrity, Federal Register, Vol. 40, No. 172 (September 4, 1975); Ford's Amended Response to Request for Admissions 1, 2, 3, 4, 5, 11, 13, 14, 15, 16, 17; and documents and other evidence referenced in Wallingford's December 12, 2003 expert report. Because other evidence exists as to the issue of notice, the prejudice of the admission of Wallingford's other similar incidents testimony outweighs its probative value.

CONCLUSION

For these reasons, it is recommended that the motions to exclude expert testimony of Dr. Pamela Kiecker and Dr. Marjorie Adams be overruled as the objections raised by Ford go to the weight to be attributed the evidence and not its admissibility, and questions of consumer expectations as regards battery disconnects are for the jury. Additionally, Kiecker and Adams fully meet the expert testimony requirements under Fed. R. Evid. 702, 703 and *Daubert*. Further, it is recommended that the motions to exclude fire origin experts Charles Crim and Samuel McKnight be overruled as they fully meet the expert testimony requirements under Fed. R. Evid. 702 and *Daubert*. Finally, it is recommended that Ford's motion to exclude Jerry Wallingford be granted in part and overruled in part. Wallingford may testify as to fire cause and origin;

the feasibility and availability of battery disconnects in 1999; the design and installation of battery disconnect devices in an exemplar 1999 Mustang GT; that a 1999 Mustang GT lacking battery disconnect devices was unreasonably dangerous; and that the absence of battery disconnect devices was the proximate cause of the fire as set forth in Opinions I, II, VIII and IX. As noted above, Wallingford may not render, as expert opinions, the opinions set forth in his Opinions III, IV, V, VI and VII. Certainly, the documentary and evidentiary support for these opinions, however, may be introduced into evidence independently or as background and support for Wallingford's other opinions under Fed. R. Evid. 703.

The Clerk is directed immediately to transmit the record in this case to the Hon. Norman K. Moon, United States District Judge. Both sides are reminded that pursuant to Rule 72(b) they are entitled to note any objections to this Report and Recommendation within ten (10) days hereof Any adjudication of fact or conclusion of law rendered herein by the undersigned not specifically objected to within the period prescribed by law may become conclusive upon the parties. Failure to file specific objections pursuant to 28 U.S.C. § 636(b)(1)(C) as to factual recitations or findings, as well as to the conclusions reached by the undersigned, may be construed by any reviewing court as a waiver of such objection.

The Clerk of the Court hereby is directed to send a certified copy of this Report and Recommendation to all counsel of record.

Appendix H

Enter this 28th day of June, 2004.

s/ Michael F. Urbanski
Michael F. Urbanski
United States Magistrate Judge

APPENDIX I — REPORT AND RECOMMENDATION OF THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF VIRGINIA, DANVILLE DIVISION DATED AND FILED JUNE 21, 2004

UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF VIRGINIA
Danville Division

Civil Action No. 4:03CV74

JOHN WITTEN TUNNELL,

Plaintiff

v.

FORD MOTOR COMPANY,

Defendant

REPORT AND RECOMMENDATION

This matter is before the court for report and recommendation pursuant to 28 U.S.C. § 636(b)(1)(B) concerning defendant Ford Motor Company's Motion for Summary Judgment. This motion has been extensively briefed and oral argument was heard on June 10, 2004. Upon review of the substantial filings and consideration of the argument of counsel, for the reasons set forth herein, it is recommended that Ford's motion for summary judgment be overruled and that this action proceed to trial.

Appendix I

OVERVIEW

Ford's motion for summary judgment raises two principal issues: (1) whether Tunnell can demonstrate the existence of a genuine issue of material fact required to prove a design defect in a products liability case under Virginia law; and (2) whether there is sufficient evidence of proximate cause. At this stage, Ford has not met its burden of demonstrating that there is no genuine issue of material fact in dispute as to the existence of a design defect in the 1999 Mustang GT rendering it unreasonably dangerous. Despite Ford's arguments, substantial factual questions exist as to whether reasonable consumers would have expected this car to be equipped with a battery disconnect device in 1999 and as to whether the absence of such a device was the proximate cause of this accident. As such, it is recommended that Ford's motion for summary judgment be overruled.

STATEMENT OF FACTS

On November 18, 1999, Plaintiff Tunnell was in the front passenger seat of a 1999 Ford Mustang GT which collided with a utility pole in Henry County, Virginia. Tunnell suffered a broken leg and was pinned in the vehicle by the resulting damage from the collision. Minutes after the collision, but before Tunnell could be freed from the wreckage, a fire ignited in the passenger compartment. Some eyewitnesses at the scene believed the fire to be electrical in origin because of the odor of the fire and because they saw blue "sparking" in the dashboard near the radio. Tunnell, pinned inside the car

for roughly forty-five minutes, was severely burned as fire engulfed the car's interior.

Tunnell brings this product liability action against Ford for implied breach of warranty and defective design as a result of his burn injuries. Tunnell claims that the 1999 Mustang GT was defective in design and unreasonably dangerous because it did not have a safety device to disconnect the battery after the collision which he contends would have prevent the fire from starting. By means of expert testimony, Tunnell expects to prove that the fire stated in the dashboard because the wiring harness was crushed in the impact. As there was no battery disconnect device or other means to shield the wires from crush damage, the crushed wires remained hot after the impact, causing an electrical event known as a high resistance fault. Tunnell's experts claim, based on their examination of the vehicle employing national fire origin investigation methodology, that the fire was caused by a high resistance fault. A characteristic of such a fault is that such a fire could have started without blowing a fuse.

Although there are no government nor industry standards requiring automobile manufacturers to equip vehicles with such devices, the auto industry has been aware of the hazard associated with post-collision fires for years. Plaintiff expects to introduce evidence that Ford's internal studies of this issue dating back to 1975 state that installation of such devices would have been 85% effective in eliminating crash fires. In 1978, Ford estimated the cost in 1973 dollars of available battery-

disconnect switches to be $2.50. Further, the National Highway Transportation Safety Administration twice (1975 and 1995) asked the industry to comment on the efficacy of such devices. Thus, the hazard was well known. Indeed, Ford uses an inertia disconnect switch to shut off power to the fuel pump in the case of impact. Plaintiff contends that such an inertia disconnect device should have been attached to the battery as well. Nevertheless, it is undisputed that no Ford or other vehicle sold in 1999 or since had such an inertia battery disconnect device installed on it.

Plaintiff's expert engineer, Jerry Wallingford, has installed such a device on a 1999 Mustang GT, and opines that this device, coupled with other commonly available materials, would have prevented Tunnell's burn injuries. At least one of the Ford witnesses deposed, Victor DeClercq, appears to agree. DeClercq testified that Ford considered a battery disconnect device as a means to prevent vehicle fires, and admitted, albeit tentatively, that "at least it's a possibility, that an electrical cutoff may have assisted or may have helped in this case. And that's not even completely certain in my mind yet." DeClercq Dep. (7/29/02) at 47.

Tunnell seeks to establish a breach of implied warranty by proving that Ford failed to meet reasonable consumer expectations regarding such a battery disconnect device. As evidence of reasonable consumer expectations, Tunnell offers circumstantial evidence regarding the industry's awareness of the hazard and the feasibility of a safety measure and direct evidence

in the form of retrospective consumer expectations surveys.

DISCUSSION

I. *Summary Judgment Standard*

Summary judgment is appropriate only if there is no genuine issue of material fact as to whether the 1999 Mustang was unreasonably dangerous when it left Ford's hands because it did not have a battery disconnect device and whether this was the proximate cause of Tunnell's injury. Fed.R.Civ.P. 56(c); *see, e.g., Logan v. Montgomery Ward & Co.*, 216 Va. 425, 219 S.E.2d 685 (1975). A genuine issue of a material fact exists "if the evidence is such that a reasonable jury could return a verdict for the non-moving party." *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 247-48, 106 S.Ct. 2505, 91 L.Ed.2d 202 (1986). In making this determination, "the court is required to view the facts and draw reasonable inferences in a light most favorable to the non-moving party." *Shaw v. Stroud*, 13 F.3d 791, 798 (4th Cir.1994) (citations omitted), *cert. denied*, 513 U.S. 813, 115 S.Ct. 67, 130 L.Ed.2d 24 (1994); *Felty v. Graves-Humphreys Co.*, 818 F.2d 1126, 1129 (4th Cir.1987). Nevertheless, where the record taken as a whole cannot lead a rational trier of fact to find for the non-moving party, no genuine issue exists for trial and summary judgment is appropriate. *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 587, 106 S.Ct. 1348, 89 L.Ed.2d 538 (1986).

II. *Design Defect*

In a products liability case in Virginia alleging a defective design, "a court will consider safety standards promulgated by the government or the relevant industry, as well as the reasonable expectations of consumers." *Alevromagiros v. Hechinger Co.*, 993 F.2d 417 (4th Cir.1993), quoting, *Sexton v. Bell Helmets, Inc.*, 926 F.2d 331, 337 (4th Cir.) (applying Kentucky law), *cert. denied*, 502 U.S. 820, 112 S.Ct. 79, 116 L.Ed.2d 52 (1991).

Ford argues that Tunnell presents no genuine issue of material fact as to the existence of any (1) government standard, (2) industry standard, or (3) reasonable consumer expectation regarding the lack of a battery disconnect device which the plaintiff argues renders the 1999 Ford Mustang GT unreasonably dangerous for ordinary use or foreseeable misuse at the time it left Ford's hands. Each of these three aspects of the *Alevromagiros* standard will be discussed in turn.

A. *Government Standard*

There is no dispute that there is no relevant government standard in this case, so that this prong of the *Alevromagiros* test is unavailable to plaintiff Tunnell. There is, however, evidence that twice, once in 1975 and once in 1995, the National Highway Transportation Safety Administration ("NHTSA") requested comments from the automobile industry on issues related to post-collision fires and battery disconnect devices. Because no standard ultimately was established, however, this evidence is only relevant to the issue of reasonable consumer expectations.

Appendix I

B. *Industry Standard*

There is no genuine issue of material fact concerning the existence of any industry standard, as no industry body, such as the Society of Automotive Engineers ("SAE"), has issued any voluntary or mandatory standards governing the installation of battery disconnect devices. Ford contends that the affidavit of Andrew J. Neuhalfen, one of its expert witnesses, establishes that no passenger vehicle sold in the United States has ever had a battery disconnect device of the sort plaintiff contends should have been installed in the 1999 Mustang GT. Indeed, while BMW has had a version of a battery disconnect device on certain models of its cars,[1] no vehicle manufactured or sold in the United States has ever had a battery disconnect device of the sort plaintiff suggests should have been installed. Although there is no governing industry standard as such, Ford argued for the first time at the June 10 hearing that the custom and practice of the industry was not to install a battery disconnect device. At that hearing, Ford argued that the lack of any battery disconnect devices throughout the auto industry constitutes an industry standard, in and of itself.

The court believes that the reference to "industry standard" as that term is used in *Alevromagiros* and

1. BMW has installed a device which, upon impact, disconnects the starter and alternator from the battery. This device does not disconnect the direct current flowing from the battery to the wiring harness in the interior of the BMW in the same manner that plaintiff suggests the design should have incorporated in this case.

Sexton refers to a formally promulgated standard such as those set by SAE, American National Standards Institute ("ANSI"), Underwriters Laboratories ("UL") or other such industry groups and not merely to informal industry custom and practice. This is apparent for three reasons. First, the *Alevromagiros* decision itself refers expressly to formally issued standards where it states as follows: "[i]n determining what constitutes an unreasonably dangerous defect, a court will consider safety standards promulgated by the government or the relevant industry, as well as the reasonable expectations of consumers." 993 F.2d at 420 (emphasis added). Second, both *Alevromagiros* and *Sexton* concerned formally adopted industry standards. Finally, the Fourth Circuit in *Sexton* identified "actual industry practices" as a source of proof for evidence of consumer expectations. It is clear therefore that the Fourth Circuit in *Alevromagiros* and *Sexton* did not equate such "actual industry practices" with "safety standards promulgated by ... the relevant industry." Regardless of whether "industry standard" means a formal set of industry guidelines or, as Ford argues, merely the custom and practice in an industry, it makes no difference in this case as there is no evidence that Ford failed either test.

C. *Consumer Expectations.*

As there is no proof that the design of the 1999 Mustang GT did not meet either government or industry standards, the issue is whether there is any evidence in this case to meet the third prong of the *Alevromagiros* test, *i.e.*, whether there is a genuine issue of material

fact that reasonable consumers would have expected a 1999 Mustang GT to have a battery disconnect device sufficient to prevent the fire in this case. Plaintiff offers three categories of evidence as regards consumer expectations.

First, Tunnell offers what he suggests is direct evidence of consumer expectations in the form of the expert opinions of survey experts Marjorie Adams and Pamela Kiecker. Adams and Kiecker will testify, based on the results of surveys commissioned for the purposes of this litigation, that a majority of consumers polled expected that a car sold in 1999 would have incorporated a battery disconnect device.[2]

Second, plaintiff offers indirect, circumstantial and anecdotal evidence of reasonable consumer expectations including such things as "actual injury practices, knowledge at the time of other injuries, knowledge of dangers [and] the existence of published literature," *Sexton v. Bell Helmets*, 926 F.2d at 337, just the sort of evidence noted by the Fourth Circuit as being probative on this issue. In this regard, plaintiff offers evidence that his engineering expert, Jerry Wallingford, designed a battery disconnect device using components that existed in 1999, including the very same switch Ford has used to

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2. Ford has filed a *Daubert* challenge to Adams' and Kiecker's testimony. Case law establishes that Ford's challenges to these survey expert's testimony properly goes to the weight and not the admissibility of such testimony, and it is recommended that their testimony be admitted. Ford's *Daubert* motions will be addressed in a separate report.

disconnect the fuel pump in the case of crashes since 1985. Plaintiff also indicates that it will offer evidence of the known risk of post-collision fires and the knowledge in the industry since at least 1975 that battery disconnect devices may reduce that danger. Given that Wallingford's exemplar design uses components existing in 1999, including the very same switch Ford uses to cut off the current flowing to the fuel pump in the case of a collision, and the fact that Ford, the industry and the National Highway Transportation Safety Administration ("NHTSA") have been aware of the danger of post-collision fires for the past 30 years, a jury could conclude that a reasonable consumer would have expected just such a battery disconnect device to have been installed to remedy this known hazard.

Finally, plaintiff offers the opinion testimony of Wallingford on the question of reasonable consumer expectations based on his study of the development of a practical and feasible design, existing industry practices, knowledge of the danger and relevant literature. While the court in *Blevins v. New Holland North America, Inc.*, 128 F.Supp.2d 952 (W.D.Va.2001), allowed such an opinion to survive a *Daubert* challenge, Wallingford, a mechanical engineer, lacks any qualifications and employs no reliable methodology in expressing an opinion as to consumer expectations. Thus, it is recommended that this Wallingford opinion not be allowed.[3]

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3. Ford has challenged all of Wallingford's opinions. While not all of Wallingford's myriad opinions are admissible, certain (Cont'd)

Ford argues in response that the fact that no manufacturer has put a battery disconnect device on a car establishes the lack of a consumer expectation entitling it to judgment as a matter of law. But this argument begs the factual question as to whether a reasonable consumer, weighing the costs of a safety device and the risks of not having one, would expect manufacturers to make such a device available. It is up to the jury to determine whether, given all of the facts as to what was known about the danger of post-collision fires and battery disconnect devices in 1999, a reasonable consumer would have expected Ford to put such a device on the Mustang GT. Certainly, the fact that no auto manufacturer has employed a battery disconnect device of the type suggested by Tunnell's expert Wallingford is strong evidence from which the jury could decide that the 1999 Mustang GT is not unreasonably dangerous. By the same token, however, the simple fact that the industry has not chosen to adopt a known safety device does not exonerate Ford. *See Turner v. Manning, Maxwell & Moore, Inc.*, 216 Va. 245, 251, 217 S.E.2d 863, 868 (1975) ("[E]vidence of industry custom does not establish conclusively that due care was exercised.") *Bly v. Southern Ry. Co.*, 183 Va. 162, 172-73, 31 S.E.2d

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(Cont'd)

of his core opinions are admissible, including his opinion that the design of the 1999 Mustang GT lacking a battery disconnect device was unreasonably dangerous, that a battery disconnect device was practical and feasible in 1999; and that the absence of such device was the proximate cause of the fire that injured Tunnell. Ford's *Daubert* motions will be addressed in a separate report.

564, 569 (1944) ("the fact that the bridge in question was constructed and maintained in accordance with the usage and custom of railroads tends to show an absence of negligence, but this alone is not conclusive of the exercise of due care by the railway company, for railroads may be abiding by a custom in maintaining bridges that is in fact wanting in due care.") As the Fourth Circuit noted in *Sexton*, "[w]hile society demands and expects a reasonably safe product, an examination of societal standards at any given point in time usually reveals an expectation that balances known risks and dangers against the feasibility and practicability of applying any given technology." 926 F.2d at 337. This balance is for the jury.

D. *Ford Motor Co. v. Bartholomew*

There is an additional reason why Ford's motion for summary judgment should be denied as to the existence of a design defect. Even were plaintiff not able to meet any prong of *Alevromagiros*, Virginia law suggests that Tunnell may still survive summary judgment by presenting expert testimony that the 1999 Mustang GT was unreasonably dangerous when made. In *Ford Motor Co. v. Bartholomew*, 224 Va. 421, 297 S.E.2d 675 (1982), the Virginia Supreme Court held that where there is no industry or government standard, expert testimony may be offered as to whether a product is defective. *Bartholomew* involved a gear shift which moved out of the park position causing a car to roll over a consumer's leg. Because there were no industry or government standards applicable to the gear shift in question, the

Virginia Supreme Court held that an expert witness may provide an opinion as to whether the product in question is unreasonably dangerous. The court reasoned as follows:

> As Ford says, plaintiff introduced no evidence to show that Ford's design failed to satisfy "objective engineering standards." But the record indicates that safety standards for automatic transmission design had never been promulgated. Absent an established norm in the industry, it was a matter of opinion of trained experts what design was safe for its intended use.

224 Va. at 430, 297 S.E.2d at 679. Thus, in the absence of established standards, an expert witness in a design defect case in Virginia may testify as to whether a product is unreasonably dangerous.

Critical in this regard is the Fourth Circuit's distinction of *Bartholomew* in its *Alevromagiros* decision. In *Alevromagiros*, plaintiff's expert testified that a ladder was defective even though it met the applicable ANSI standard. The Fourth Circuit's point in *Alevromagiros* was that an expert should not be allowed to testify as to his or her own opinion of a defective design where there are industry or government standards establishing the parameters of just such a design. In essence, the Fourth Circuit expressed concern with an expert in a design defect case who testified from the standpoint of his or her own standards which may

be inconsistent with or more rigorous than those established by industry or government standards or consumer expectations. The Fourth Circuit distinguished such a circumstance from one, such as in *Bartholomew* and here, where there are no established government or industry standards, as follows:

> *Bartholomew*, relied upon heavily by *Alevromagiros*, presents a markedly different factual situation. *Bartholomew* involved the design of a car whose dashboard instruments indicated the car was in park when the gear shift lever was not fully in the park position. . . . The Court found that the automobile industry had not yet promulgated safety standards relating to this particular problem. Consequently, the court admitted the opinion of plaintiff's expert that the car's design was unreasonably dangerous, based on information published by the National Highway Traffic Safety Administration, consultation with other experts, and experiments with transmission systems in at least three types of cars. . . . In the case at bar, there is neither an absence of industry standards, nor an expert opinion based on extensive testing and published reports.

993 F.2d at 421 (citations omitted).

Because there are no applicable government or industry standards for battery disconnect devices, this case more closely parallels *Bartholomew* than *Alevromagiros*.

Unlike in *Alevromagiros*, here there are no prevailing industry or government standards. Under such a circumstance, both the Fourth Circuit and the Virginia Supreme Court teach that expert evidence is admissible as to whether the design is unreasonably dangerous. As the Fourth Circuit noted in *Alevromagiros*, " '[a]bsent an established norm in the industry,' a court is constrained to rely on the opinion testimony of experts to ascertain the applicable safety standard." 993 F.2d at 421, quoting *Bartholomew*, 224 Va. at 430, 297 S.E.2d at 679.

Ford argues that *Bartholomew* is inapplicable here because it claims the absence of a battery disconnect device is the "established norm in the industry." Ford's argument, while clever, takes that phrase out of context. Clearly, the Supreme Court's reference to "industry norm" referred to "objective engineering standards" or other safety standards "promulgated" by the industry, 224 Va. at 430, 297 S.E.2d at 679, and does not refer to mere industry custom. Simply because all car manufacturers have chosen not to include a safety device on a vehicle does not make the absence of such a device an "established norm in the industry" within the meaning of the Supreme Court's opinion in *Bartholomew* sufficient to immunize such manufacturers from a products liability suit for failing to put such a device on a vehicle. Because there are no applicable government or industry standards regarding battery disconnect devices in this case, Virginia law allows plaintiff to introduce expert testimony "to ascertain the applicable safety standard." *Id.*

This was precisely the ruling of this court in *Blevins v. New Holland North America, Inc.*, 128 F.Supp.2d 952 (W.D.Va.2001). In that case, plaintiff alleged that a hay baler was defective, largely because it was not properly guarded and did not have an effective emergency stop system. As is the case here, neither the government nor the industry promulgated any standards applicable to the hay baler, and no hay baler had the type of emergency stop system advocated by plaintiff's expert, John Sevart. Just as Ford does here, New Holland contended in *Blevins* that there can be no reasonable consumer expectations because no manufacturer had produced a hay baler with an emergency stop system. Thus, New Holland contended, under *Alevromagiros*, it was entitled to summary judgment. Judge Jones disagreed, reasoning as follows:

> In the present case, unlike *Alevromagiros*, the record reflects that there are no relevant industry standards. No industry group or entity has issued a safety standard describing emergency stop systems for agricultural equipment. Moreover, it is admitted that the Model 644 has no such system and thus it was unnecessary for an expert to perform any tests to determine the product's compliance with any particular design standard. Indeed, New Holland has not suggested what particular testing it believes should have been performed by Sevart [plaintiff's expert].

> Accordingly, the present case is more like *Ford Motor Co. v. Bartholomew*, 224 Va. 421, 297 S.E.2d 675 (Va.1982), a case that was distinguished by the Fourth Circuit in *Alevromagiros*, where no industry safety standards had yet been promulgated, and the expert was allowed to express an opinion that the product was unreasonably dangerous, based on a review of the literature, experiments and consultations with other experts, among other things. *See Bartholomew*, 297 S.E.2d at 679.
>
> New Holland also contends that Sevart's testimony is insufficient because it does not establish any reasonable consumer expectation that the product should have an emergency stop system. **Consumer expectation may be particularly important in a case such as this where the evidence shows that no manufacturer has actually produced a hay baler with an emergency stop system. Since under our legal liability regime a manufacturer is not required to provide the safest conceivable design, but only meet prevailing safety standards, consumer expectation may show that there are legitimately higher standards than the industry has yet recognized or reached.** *See Redman v. John D. Brush & Co.*, 111 F.3d 1174, 1181 (4th Cir.1997).

128 F.Supp.2d at 957-58 (emphasis supplied). Application of the reasoning of *Blevins* to this case supports the conclusion that summary judgment be denied.

To a lesser degree, the present case also bears similarity to a 1998 case decided by Judge Turk, *Jeong v. Honda Motor Co., Ltd.*, 1998 U.S. Dist. LEXIS 8124 (W.D.Va. April 24, 1998). In *Jeong v. Honda*, plaintiff was injured when his Honda Accord automobile rolled over following an accident on Interstate 81 and its roof collapsed. Although Jeong's Accord met the applicable government and industry standards, the court noted that certain manufacturers other than Honda had exceeded the established standards and had done additional testing and evaluation of roof strength in production vehicles, effectively raising consumer expectations. The court reasoned:

> In addition, Mr. Stilson [plaintiff's expert] testified that although the public is aware of the dangers of roof crush and serious injury in high speed rollovers in accidents where a vehicle falls from a significant height, the public is not aware of the dangers of roof crush and head and neck injury in low speed rollovers such as the one experienced by plaintiff. Accordingly, the Court finds that plaintiff has presented sufficient evidence of a product defect under *Alevromagiros.*

1998 U.S. Dist. LEXIS 8124 at *19-20. Plaintiff Tunnell argues that the *Jeong v. Honda* decision suggests that even though consumers may not be aware of a product danger, the jury should be allowed to consider whether, given all of the facts, a reasonable consumer would expect that a manufacturer protect against that danger. Thus,

while Tunnell concedes that consumers may not have been aware of the danger of post-collision fires and a battery disconnect safety device, he argues that a jury should be allowed to decide whether, given all of the facts known in 1999 at the time of the manufacture of the Mustang GT, a reasonable consumer would have expected Ford to put such a device on its vehicles. As Tunnell has provided sufficient evidence from which a jury could conclude that that such a consumer expectation was reasonable, the court agrees and finds summary judgment not to be appropriate.

At argument, Ford relied heavily on the Eastern District of Virginia's decision in *Mears v. General Motors Corp.*, 896 F.Supp. 548 (E.D.Va.1995), in which the court granted summary judgment for GM in a defective brake design case. Plaintiff Mears contended that her truck was unreasonably dangerous because it used a single hydraulic braking system instead of a safer split hydraulic system. The hydraulic braking system on Mears' truck, manufactured in 1966, failed, and she was injured in an accident on the Eastern Shore in 1992. Like Ford in this case, GM moved for summary judgment, contending that there were no government or industry standards and no manufacturer of medium duty trucks in 1966 used anything other than the single braking system on Mears' truck. GM offered expert testimony that "consumers clearly expected manufacturers to use only the single braking system on medium duty trucks. According to defendant, the consumer preference for the single braking system was rooted in lower initial costs and lower maintenance costs." 896 F.Supp. at 552. GM's

evidence included testimony from a former automotive engineer for a large purchaser of medium duty trucks, UPS, who testified that it had evaluated the split braking system and found the additional costs of such a system not to be warranted. There is no suggestion in the *Mears* opinion that Mears offered any evidence that reasonable consumers expected a split braking system; in fact, the only evidence was to the contrary. Instead, Mears countered by arguing that "consumers were not in a position to know what was best for them, and that if the industry had been forthright about the benefits of the split braking system, consumer demand would have been altered considerably." 896 FSupp. at 553. As plaintiff Mears offered no evidence of consumer expectations, it is not surprising that the court granted summary judgment, concluding that "[t]he requirements set forth by the courts ensure that only when the product in question is measured against concrete standards and expectations, and falls short of these criteria, can it be found to be unreasonably dangerous." *Id*. In contrast, plaintiff Tunnell offers both direct and circumstantial evidence of consumer expectations. As such, Ford's reliance on the Eastern District's opinion in *Mears v. General Motors* is misplaced.

While it is certainly true that "a manufacturer is not an insurer and is not required to design and market an accident-proof product," *Turner v. Manning, Maxwell & Moore, Inc.*, 216 Va. 245, 251, 217 S.E.2d 863, 868 (1975), or supply a product which "incorporate[s] the best or most highly-advanced safety devices," *Marshall v. H.K. Ferguson Co.*, 623 F.2d 882, 886 (4th Cir.1980), it

cannot be said that no genuine issue of material fact exists in this case regarding whether the 1999 Mustang GT was unreasonably dangerous by not incorporating a battery disconnect device akin to the device Ford used to disconnect the fuel pump. As a result, it is for the jury to determine whether reasonable consumers would have expected such a device and whether the lack of such device rendered the car in which Tunnell rode unreasonably dangerous.

III. Proximate Cause

Ford also contends that plaintiff is not entitled to relief because he has not presented sufficient evidence that the lack of a battery disconnect device was the cause of plaintiff's injuries. Ford relies on this court's holding in *Lemons v. Ryder Truck Rental, Inc.*, 906 F.Supp. 328 (W.D.Va.1995), as support for its view. In *Lemons*, Judge Williams stated that "unless the alternative design offered would in fact have prevented the accident from occurring, plaintiff cannot establish causation." *Id.* at 334.

Plaintiff's theory of the case is that the wiring harness of the 1999 Mustang GT was crushed in the impact, causing certain wires in the harness to experience a high resistance fault, which his experts claim sparked a fire in the dashboard.

Ford argues that as Tunnell cannot pinpoint the wire or connection he claims faulted and ignited the fire, he cannot establish but for causation. Ford is wrong. By

means of the testimony of fire origin experts Charles Crim and Samuel McKnight, Tunnell will present evidence that the fire was caused by a high resistance fault in the wiring harness in the dashboard of the 1999 Mustang GT.[4] While Ford disputes this evidence, the cause of the fire is a factual question for the jury as aided by experts on both sides.

Of course, it is not enough for Tunnell to establish the source of the fire; rather he must prove that but for the absence of the safety device, the interior of the Mustang would not have caught fire injuring Tunnell. Plaintiff seeks to meet this burden by offering an opinion to that effect by Jerry Wallingford, an engineering expert who installed a battery disconnect device on a 1999 Mustang GT using common materials such as armored cable and the same inertia switch Ford uses on its cars to disconnect the fuel pump in the case of an impact.[5] Wallingford's design uses the inertia switch to

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4. Ford has filed motions to exclude expert testimony of Crim and McKnight, but their testimony clearly is admissible under the *Daubert* test. Ford's *Daubert* motions will be addressed in a separate report.

5. By letter dated June 14, 2004, Ford seeks to exclude any reference to protecting safety circuits from crush damage suggesting that this is new information. It is difficult to see how Ford can take this position, however, as Wallingford's opinion of December 12, 2003 repeatedly refers to separating and protecting safety circuits and protecting against post-collision fires by means of commercially available safety devices. *See, e.g.*, Jerry Wallingford Letter Opinion of December 12, 2003 at 5-8,

(Cont'd)

disconnect the wiring harness in the case of impact which would prevent a high resistance fault of the type plaintiff's experts claim caused the fire in the interior of the Mustang. Wallingford segregates certain other wires, termed safety circuits, which need to remain "on" or "hot" even in the case of an impact, such as the emergency flasher, electric windows and door locks, and places them in commercially available crush proof armored cable. Tunnell argues that he need not pinpoint the precise wire which sparked first to establish causation as Wallingford's design protects all wires in the dashboard from crush damage either by the inertia battery disconnect switch or the armored cable. This is not a case like *Logan v. Montgomery Ward & Co.*, 216 Va. 425, 219 S.E.2d 685 (1975), where the plaintiff could not identify the defect in the stove which caused it to explode and her home to catch fire. Instead, Tunnell has identified the source of the fire as a high resistance fault in the wiring harness and will present evidence that he would not have sustained his burn injuries had Ford installed the Wallingford device, which Tunnell claims was practical and feasible when the 1999 Mustang GT was manufactured. Finally, Tunnell points to the fact that

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(Cont'd)

10, 12, and 23. Moreover, Ford has been aware of Wallingford's design using armored or crush proof wires for some time and deposed him about this design on May 20, 2004. *See, e.g.*, Wallingford Dep. III at 57. Finally, the complaint in this case cannot fairly be read so narrowly to exclude such evidence. Indeed, paragraphs 42(b) and (c) generally refer to "available technology" to prevent crush damage to wiring, which could include both a battery disconnect device or armored cable.

Ford's own witness, Victor DeClercq testified that "at least it's a possibility that an electrical cutoff may have assisted or may have helped in this case." DeClercq. (7/29/02) at 47. While Ford certainly will try to convince the trier of fact that DeClercq was uncertain in his causation statement, his concession alone is enough to create a jury issue as proximate cause.

Thus, Tunnell's evidence is sufficient to create a jury issue as to causation. *See Virginian Ry. Co. v. Haley*, 156 Va. 350, 157 S.E. 776 (1931). The *Haley* opinion sets forth well established Virginia law on proximate cause.

> The evidence tending to show causal connection must be sufficient to take the question out of the realm of mere conjecture, or speculation, and into the realm of legitimate inference, before a question of fact for submission to the jury has been made out. When, however, the accident is of a nature which the [safety device is] designed to prevent, if there be evidence tending to establish facts and circumstances from which it may be fairly inferred, or the conclusion fairly reached, that, according to the ordinary experience of mankind, there is a reasonable probability that the accident would not have happened, had the [safety device been installed], such evidence is sufficient to take the question of causal connection out of the realm of conjecture and into the realm of legitimate inference.

156 Va. at 382, 157 S.E. at 786. Applying this time honored test of proximate cause, Tunnell has set forth sufficient facts to give rise to a jury issue.

IV. Conclusion

For these reasons, it is recommended that Ford's motion for summary judgment be **DENIED**.

The Clerk is directed immediately to transmit the record in this case to the Hon. Norman K. Moon, United States District Judge. Both sides are reminded that pursuant to Rule 72(b) they are entitled to note any objections to this Report and Recommendation within ten (10) days hereof. Any adjudication of fact or conclusion of law rendered herein by the undersigned not specifically objected to within the period prescribed by law may become conclusive upon the parties. Failure to file specific objections pursuant to 28 U.S.C. § 636(b)(1)(C) as to factual recitations or findings as well as to the conclusions reached by the undersigned may be construed by any reviewing court as a waiver of such objection.

The Clerk of the Court hereby is directed to send a certified copy of this Report and Recommendation to all counsel of record.

Enter this 21st day of June, 2004.

s/ Michael F. Urbanski
Michael F. Urbanski
United States Magistrate Judge

APPENDIX J — ORDER OF THE UNITED STATES COURT OF APPEALS FOR THE FOURTH CIRCUIT DENYING PETITION FOR REHEARING FILED AUGUST 28, 2007

UNITED STATES COURT OF APPEALS
FOR THE FOURTH CIRCUIT

No. 05-2112
CA-03-74-NKM

JOHN WITTEN TUNNELL

Plaintiff - Appellant

v.

FORD MOTOR COMPANY

Defendant - Appellee

No. 06-1799
4:03-cv-00074-nkm

JOHN WITTEN TUNNELL

Plaintiff - Appellant

v.

FORD MOTOR COMPANY

Defendant - Appellee

Appendix J

On Petition for Rehearing and Rehearing En Banc

The appellant's petition for rehearing and rehearing en banc was submitted to this Court. As no member of this Court or the panel requested a poll on the petition for rehearing en banc, and

As the panel considered the petition for rehearing and is of the opinion that it should be denied,

IT IS ORDERED that the petition for rehearing and rehearing en banc is denied.

Entered for a panel composed of Judge Michael, Senior Judge Wilkins, and District Judge Norton.

For the Court,

/s/ Patricia S. Connor
CLERK

APPENDIX K — EXCERPTED TRANSCRIPT OF PROCEEDINGS BEFORE HONORABLE NORMAN K. MOON DATED JUNE 8, 2005

[commencing at p. 98] * * *

Q. Yesterday, and on your direct examination, I believe that ultimately what you were saying is that the lack of a battery cutoff switch, in your opinion, even though you haven't done these failure modes and effects analysis, or evaluated the risks that I was just talking about, but nevertheless, you said in your opinion that the lack of a battery cutoff is a defect in a vehicle?

A. Yes.

Q. Do you remember being asked the same question in deposition in this case?

A. Yes.

Q. And do you remember on March 7th, 2003, you were asked that question?

A. Just a moment. If you could tell me the page and line number.

Appendix K

Q. I'll refer you to page 26, to lines 10 and 11.

[99] Were you asked whether cars that don't have battery cutoffs are defective? And did you say, among other things, "I'm not going to call it defective."

A. Yes, sir. Explaining previous verbiage, that's what I said on that page and that line.

Q. Let's read your whole answer.

"Question: And like you said the last time" — and by the way, this is asking about your first deposition, right?

A. Yes, it is.

Q. This is your second deposition?

A. Yes, it is.

Q. The lawyer is just confirming that you haven't changed your opinion?

A. That's correct.

Q. "Question: And like you said the last time, if the Ford's defective then for not having a BCO, they are all?"

And your answer: "No, I did not. I'm saying I'm not going to call it defective. I'm saying this accident, the trauma that occurred to Mr. Tunnell, was because these

— there was not a BCO vehicle, BCO system in that, battery cutoff system. I'm saying it would have been a safer vehicle, my vehicle, your vehicle, Mr. Smith's vehicle, if it was equipped with a BCO. I'm not going to stand here and say every vehicle that doesn't have one is defective."

That's what you said?

[100] A. Yes, that's correct.

Q. Have you changed that opinion —

A. No, sir, I think I indicated —

MR. CEREGHINI: I'm sorry, that was my question. He's answered it.

* * *

[155] * * *

Mr. Wallingford, a selection or portion of your deposition was reviewed with you concerning a discussion about defectiveness, and I would like for you to review and read into the record portions of that testimony ahead of and after that particular testimony that was reviewed with you.

Appendix K

And if you would, please, sir, it relates to counsel's examination of you with respect to page 26 of your deposition of March 7th, 2003, at lines 10 and 11.

* * *

[156] * * *

Q. I'll ask the question, and you can give the answer, Mr. Wallingford.

"If it doesn't have electric seats, electric door locks, electric windows, those type of things, would the vehicle then not have wiring coming into the occupant compartment?"

A. All right, now, before I read it, I made a correction to that portion before it was submitted back to the court reporter.

Q. And what was that correction?

A. My answer is, "No. And we can even extend that list beyond that. Some of these won't have radios, some of these vehicles wont have AC, so they even have fewer wires. We can get this down to a skeletal level with a minimum number of accessories, but it still would have wiring coming into the compartment, it will still have wiring going to the center of [157] the dash, it will still have wiring going to the right side of the vehicle, in front of the right front passenger, and still in my opinion should have had — would have been a safer vehicle with a BCO."

Appendix K

Q. "And that would hold true not only of the Ford's on this list, that would hold true for every —"

A. "The vehicle that I drive."

Q. "The vehicle that you drive and every single vehicle —"

A. "That's correct.

Q. " — made?"

A. "That's correct. And we, as I indicated last time, had we begun to do that in the automotive manufacturing world 10, 15, 20 years ago, we would have better, safer vehicles on the road, and we would have more people alive today than exist. But the manufacturing world did not go that direction for various reasons."

Q. "And like you said the last time, if the Ford is defective then for not having a BCO, they all are?"

A. "No, I did not. I'm saying — I'm not going to call it defective. I'm saying that this accident, the trauma that occurred to Mr. Tunnell, was because there was not a BCO vehicle — BCO System in that, battery cut-off system. I'm saying it would have been a safer vehicle, my vehicle, your vehicle, Mr. Smith's vehicle, if it was equipped with a BCO. I'm not going to stand here and say every vehicle that doesn't [158] have one is defective."

Appendix K

Q. "Okay. Are you saying that the Ford is defective, the 1999 Mustang, for not having one?"

A. "I'm saying this vehicle was unreasonably dangerous relative to this event and relative to any post-collision fire that will be in — that it would be in, because it does not, did not have a battery cut-off switch. And studies have indicated that they have been available to Ford engineers, as well as others, for years."

* * *

APPENDIX L — STATUTE AND RULE INVOLVED

28 U.S.C. § 1652

Sec. 1652. State laws as rules of decision

> The laws of the several states, except where the Constitution or treaties of the United States or Acts of Congress otherwise require or provide, shall be regarded as rules of decision in civil actions in the courts of the United States, in cases where they apply.

Fed. R. Evid. 702

Rule 702. Testimony by Experts

> If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.